

MUNICIPAL TECHNICAL ADVISORY SERVICE

July 15, 2014

City of Fayetteville Tennessee Mr. Jeffrey H. Siefert Planning and Code Enforcement Official 110 Elk Avenue South Fayetteville, Tennessee 37334

VIA ELECTRONIC MAIL

Dear Mr. Siefert:

Responsive to your request, please find enclosed a representative sample of subdivision regulations for the following cities with population:

0	Brentwood	(37,060)
0	Columbia	(34,681)
0	Dickson	(14,538)
0	Franklin	(62,487)
0	Oak Hill	(4,529)
0	Sevierville	(14,807)
0	Smyrna	(39,974)

Please let me know if you require further assistance regarding this matter.

Very truly yours,

Jeffrey J. Broughton

Municipal Management Consultant



As formally adopted and applied by the Brentwood Planning Commission.

December 7, 2009 (Effective: January 1, 2010)

City of Brentwood Planning and Codes Department Post Office Box 788 Brentwood, TN 37024-0788 615.371.2204



APPENDIX A TO THE BRENTWOOD ZONING ORDINANCE SUBDIVISION REGULATIONS

		<u>PAGE</u>
Subdivisio	on Process Summary.	6
Article On	e. General Provisions	
<u>SECTION</u>	<u>TITLE</u>	<u>PAGE</u>
1.1	Title.	8
1.2	Policy and Purpose.	8
1.3	Authority.	9
1.4	Jurisdiction.	9
Article Tw	o. Procedure for Subdivision Approval	
<u>SECTION</u>	TITLE	<u>PAGE</u>
2.1	Preliminary Meeting Required.	10
2.2	Application for Formal Consideration.	10
2.3	Procedural Steps for Subdivision Actions.	10
Article Th	ree. Preliminary Plan	
<u>SECTION</u>	<u>TITLE</u>	<u>PAGE</u>
3.1	Concept Development Plan.	14
3.2	Filing and Review of Preliminary Plan.	14
3.3	Preliminary Plans, Scale and Size.	14
3.4	Dedication of Additional Right-of-Way for Existing Streets.	15
3.5	Preliminary Plan Contents.	15
3.6	Street Names.	17
3.7	Corrected copies of the Preliminary Plan.	18
3.8	Approval or Disapproval of a Preliminary Plan.	18
3.9	Approval Not to Constitute Approval of Final Plat.	18
3.10	Duration of Approval.	18
3.11	New Plan - When Permitted or Required.	18
Article Fo	ur. Construction Drawings/Record Drawings	
<u>SECTION</u>	<u>TITLE</u>	<u>PAGE</u>
4.1	Construction Plans Generally.	20
4.2	Submission of Construction Drawings and Construction Infrastructure.	20
4.3	Construction Etiquette.	21
4.4	Revisions of Construction Drawings after Commencing Construction.	21
4.5	Record Drawings.	21

Article Five. Final Plat

SECTION	TITLE	<u>PAGE</u>
5.1	Final Plat General.	22
5.2	Submission Deadline and Provided Copies.	22
5.3	Time Limit for Approval of Disapproval – Duration of Approval.	22
5.4	Approval Not to Constitute Acceptance of Streets.	22
5.5	Improvements Required before Recordation of the Final Plat.	23
5.6	Final Plat Specifications.	23
5.7	Accompanying Certificates.	25
5.8	Security.	25
5.9	Disposition of Original Copy.	25
5.10	Acceptance of Streets and Associated Infrastructure.	26 26
5.10	Acceptance of Streets and Associated Infrastructure.	20
Article Six.	Design Standards.	
<u>SECTION</u>	<u>TITLE</u>	PAGE
6.1	Streets Generally.	28
6.2	Street Design.	28
6.3	Street Right-of-Way Widths.	30
6.4	Street Pavement Sections.	31
6.5	Curbs and Gutters.	32
6.6	Roundabouts.	32
6.7	Sidewalks.	34
6.8	Street extensions to/into Adjoining Properties.	35
6.9	Private Streets and Gated Subdivisions.	36
6.10	Storm Drainage.	37
6.11	Community Assets and Public Use/Service Areas.	44
6.12	OSRD –IP Open Space Residential Development – Innovative Project – Design	44
0.12	Standards – Zoning District.	77
6.13	Historic Rural Development Standards.	48
6.14	Lots.	49
6.15		50
6.16	Easements.	50 50
	Large Tracts or Parcels.	
6.17	Suitability of Land.	50
6.18	Dedications.	50
6.19	Street Lights, Signage and Sign Posts.	52
Article Sev	en. Construction Standards.	
<u>SECTION</u>	<u>TITLE</u>	PAGE
7.1	Purpose.	52
7.2	Required Improvements.	52
7.3	Grading.	52
7.4	Street Construction.	55
7.5	Street Lighting.	58
7.6	Traffic Control, Street Markers and Warning Signage.	59
7.7	Driveways.	59
7.8	Inspection/Testing of Streets and Infrastructure.	60
7.9	Utility Systems.	61
7.10	Suspended Construction.	63
	1	

Article Eight. Surety for Completion and Maintenance of Improvements.

SECTION	<u>TITLI</u>	<u>E</u>	<u>PAGE</u>
8.1 8.2	8.1 Guarantee in Lieu of Completed Improvements. 8.2 Failure to Complete Improvements.		64 67
8.3		pletion of Approved Facilities within Open Space Areas.	68
8.4	_	ection/Testing of Improvements.	68
8.5	-	tenance Security.	68
8.6		tenance of improvements.	68
Article Nii	ne. Adı	ministration.	
<u>SECTION</u>	TITLI	<u>E</u>	<u>PAGE</u>
9.1	Inter	pretation, Conflict and Separability.	70
9.2		g Provision.	70
9.3		tion of Plats.	70
9.4		rcement.	71
9.5	Penal		71
9.6		ndments.	72
9.7	Varia		72
9.8	Appe		72
Article Te	n. Adoj	ption and Effective Date	
<u>SECTION</u>	TITLE		<u>PAGE</u>
10.1	Genera	ally.	74
		APPENDICES	
APPENDIX	<u> </u>	TITLE	<u>PAGE</u>
Appendix (One	Definitions and Acronyms.	76
Appendix '		Construction Drawings – Checklist and Standard Drawings.	84
Appendix'		Forms for Final Plat Certifications.	118
Appendix 1		Brentwood Municipal Planning Commission – Irrevocable Standby Letter of Credit Standard Form.	120
Appendix	Five	Brentwood Municipal Planning Commission – Performance Agreement.	122
		LIST OF TABLES	
TABLE NO	<u>).</u>	<u>TITLE</u>	<u>PAGE</u>
Table One		Pavement Section Designs.	30
Table Two		Compact Roundabout Standards.	33
Table Thre	ee	Urban Roundabout Standards.	33
Table Four		Minimum Easement Widths For Open Channels.	40
Table Five		Drainage Structure Design for Streets.	40
Table Six		Minimum Easement Widths For Storm Drain Conduits.	41
Table Seve	en	Minimum Design Storm Frequencies.	42
Table Eigh		Curb Radii.	47
Table Nine		Minimum Center Radii.	47
Table Ten		Stopping Sight Distances.	48

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Subdivision Regulations City of Brentwood, Tennessee

Subdivision Process Summary

These Subdivision Regulations are written to cover a wide range of activities related to subdivision and/or development of land within the City of Brentwood. Subdivision/development activities can range from a simple subdivision of one lot into two lots, to the development of a large tract into hundreds of lots with new streets, utilities and other related improvements. Because of this variability, it is not practical to write a step-by-step set of regulations that address every circumstance. Therefore, it is highly recommended that the Planning & Codes Department be consulted early in the process to review the requirements and identify potential opportunities or obstacles related to the proposal.

Zoning Ordinance - In addition to the Subdivision Regulations, the Zoning Ordinance serves as a companion guide to important aspects of land development. Generally, the specific zoning applicable to a tract or lot will dictate the allowable uses, setbacks and buffer requirements, and will address requirements in special overlay protection zones such as those affecting floodplain and hillside properties. The Zoning Ordinance and Subdivision Regulations are intended to work in concert to guide and regulate development in a way that reflects of the goals of the community. The proper zoning for the intended use must be in place before beginning the subdivision or development process.

Planning Commission – Though an applicant begins the subdivision process with a member of City staff, nearly all actions related to subdivision or development require formal approval by the Planning Commission. The Planning Commission is appointed by the Board of Commissioners (City Commission), and is the governmental body vested with the authority to hear and approve actions taken under these Regulations. City staff accepts applications, provides guidance, monitors construction, prepares reports, and performs many other functions that aid the Planning Commission and property owners throughout the process.

Process Overview – Subdivision/development actions governed by these Regulations generally fall into one of three categories:

- 1. A **minor modification** to an existing lot (commercial or residential) is proposed such as a change in the setback or shift in property line between two lots;
- 2. A **minor subdivision** is proposed where a larger tract is subdivided into two or more lots, and no new infrastructure is required, other than utility tap and service lines; or
- 3. A **major subdivision** is proposed where a larger tract is subdivided into two or more lots, and new infrastructure (streets, utilities, major drainage systems, etc.) is required.

The process for gaining approval for each of the three examples above is different. However, all three require preparation of a "final plat" or "revised final plat," and submission to the Planning Commission for review and approval. When new infrastructure such as streets, drainage systems and/or utilities is required the process involves three steps:

- 1. Approval of a Preliminary Plan by the Planning Commission (a master plan of the development);
- 2. Approval of detailed construction drawings by staff from the Engineering Department; and
- 3. Approval of a Final Plat for the entire project or section by the Planning Commission.

The details of each of these steps are outlined in these Regulations along with the technical and design requirements for new infrastructure and plat preparation.

The examples offered above are typical of most subdivision actions, but as stated earlier, the steps as well as the timeframe vary depending on the individual proposal. In most cases, a qualified engineer, landscape architect or surveyor licensed by the State of Tennessee must be involved in preparing the necessary documents for a subdivision application. City staff is available to assist and to answer any questions. Additional information along with key documents is available on the City's website (www.brentwood-tm.org).

Thank you for your interest in the City of Brentwood.



ARTICLE ONE. GENERAL PROVISIONS

1.1 Title.

These Regulations shall officially be known, cited and referred to as the Subdivision Regulations of the City of Brentwood, Tennessee.

1.2 Policy and Purpose.

The purpose of these Subdivision Regulations is to provide for the harmonious development of the City of Brentwood and its environs; to secure a coordinated layout with adequate provision for traffic, light and air, recreation, transportation, water, drainage, sewers, and other sanitary facilities and services; and to promote a distribution of population and traffic which will tend to create conditions favorable to health, safety, convenience and prosperity. Accordingly, these Subdivision Regulations set forth the procedures and minimum standards adhered to by developers of land for residential and commercial uses, and provide a guide for the Planning Commission and other City officials in exercising their duties pertaining to the review, approval and administration of land subdivision development within the jurisdiction of the City of Brentwood.

The Subdivision Regulations are further intended to:

- (1) Promote the orderly development of the City in accordance with the goals and objectives of the adopted comprehensive plan and approved updates.
- (2) Establish efficient standards for the subdivision of land that further the orderly layout and use of land, and that ensure proper legal description and monumentation of subdivided property.
- (3) Protect and conserve the value of land throughout the City and the value of buildings and improvements upon the land, and minimize the conflicts among the uses of land and buildings.
- (4) Provide suitably located streets of sufficient design to accommodate existing and anticipated traffic, affording adequate access for emergency response vehicles and equipment to buildings.
- (5) Encourage street design that moderates traffic speeds and reduces primary reliance on arterial streets.
- (6) Protect the residential character of the City, and minimize the environmental and visual impacts of new development.
- (7) Continue to enhance and expand the network of accessible open space throughout the City, preserving unique and sensitive community resources such as groundwater, floodplains, streams, historic sites, steep slopes, woodlands and wildlife habitat.
- (8) Prevent the pollution, erosion and sedimentation of waterways and drainage facilities through efficient development management practice.
- (9) Promote interconnected greenways and corridors throughout the City, particularly in floodplain areas.

- (10) Provide a planning horizon to ensure that public facilities and services are available concurrent with new development and will have a sufficient capacity to serve the proposed development.
- (11) Ensure that new development will be required to bear its fair share of the costs of supporting the community through legally appropriate developer fees, land donations, and mitigation measures that address the public costs for new facilities and services.

1.3 Authority

By authority granted by <u>Tennessee Code Annotated</u>, Title 13, Chapter 4, these Subdivision Regulations are adopted. The Planning Commission has fulfilled the requirements set forth in these statutes as prerequisite to the adoption of these Regulations, having filed a certified copy of the official Major Thoroughfare Plan of the City of Brentwood in the office of the Register of Williamson County, Tennessee.

1.4 Jurisdiction

These Subdivision Regulations shall govern all subdivision of land lying within the corporate limits of the City of Brentwood, Tennessee as now or hereafter established.

ARTICLE TWO. PROCEDURE FOR SUBDIVISION APPROVAL

2.1 Preliminary Meeting Required.

Prior to the preparation of submissions for subdivision approval, the owner or agent shall meet with staff from the Planning and Codes Department to determine the scope of the proposed action, and possible issues related to the development of the property. More complex projects may be referred to the Development Review Committee (DRC) for detailed review. The initial review shall determine whether the application is a minor or major subdivision action, and shall direct the applicant on the proper procedure for official review of the proposal.

The DRC is not intended to replace the formal review process, but meant to be the first preliminary review of a project, bringing all affected review agencies, developers and applicants together. The purpose of the DRC is to increase cost efficiency, decrease processing times, improve internal project coordination during the review of development proposals and provide a more general and ongoing review of the planning process.

The DRC shall be composed of members from the various City Departments (Engineering, Fire, Planning, Public Works, Water and Sewer) charged with reviewing development proposals for complex developments. Additionally, representatives from outside agencies including utility providers (Metropolitan Nashville, Nolensville/College Grove Utility District, Mallory Valley Utility District, Harpeth Valley Utilities, Middle Tennessee Electric Members Cooperative, etc.) and other affected State agencies may be included as representatives. The City Manager shall serve as an ex-officio member of the DRC.

2.2 Application for Formal Consideration.

These Regulations outline the minimum standards for the various documents associated with any application for subdivision approval within the City of Brentwood. The necessary documents shall be accompanied by an official application form submitted prior to deadlines established annually by the Planning Commission. Most subdivision actions are subject to the approval of the Planning Commission, which considers cases according to the officially adopted meeting schedule for the calendar year. The necessary forms and a calendar of meeting dates can be found on the City's web site – www.brentwood-tn.org. All subdivision applications shall identify the developer and all persons having any financial interest in the proposed subdivision has failed to complete required improvements or comply with conditions established by the Planning Commission for a previously approved subdivision, the City may withhold the processing of the application for the new subdivision until such deficiencies are corrected to the satisfaction of City staff.

2.3 Procedural Steps for Subdivision Actions.

Minor subdivision actions usually involve the minor modification of an existing lot (commercial or residential) such as a change in setback, a shift in a property line, or a minor division of property into two or more lots where no new infrastructure is required other than extensions of water and sewer service lines. Major subdivision actions relate to the division of land (commercial or residential) into multiple lots where new infrastructure is required.

The processes outlined as follows are intended to provide an overview of the necessary steps for the most common subdivision actions. Given the complexity of some subdivision proposals, there may be other actions, approval requirements and fees that are not detailed here. These include, but are not limited to, off-site improvements, sales offices, impact fees, utility approvals and fees, entrance features, and amenity

areas. Because each subdivision is unique, the implications and requirements for each case will be discussed in meetings with City staff, the DRC or the Planning Commission.

(1) Minor Subdivision/Plat Revision:

- a. Complete required preliminary meeting with City staff.
- b. Prepare paper copy of the draft final plat.
- c. Submit a completed application, required fees and five copies of the draft final plat to the Planning and Codes Department for review.
- d. Review and address comments provided by the Planning and Codes Department.
- e. If Planning Commission review and approval are required the Commission may defer consideration of the item if a representative acting on behalf of the property owner is not in attendance at the meeting.
- f. Make any necessary revisions to the plat, prepare mylar copy, and circulate to required agencies for signatures.
- g. Deliver signed mylar copy to the Planning and Codes Department for final approval signatures.
- h. Retrieve signed mylar copy and deliver to the County Register's office for recordation.
- i. Provide staff from the Planning and Codes Department a mylar copy of the recorded plat showing the "Recorders Information" seal on the face of the plat. The mylar copy must be received before building permits will be issued for the project.
- j. Provide planning staff with a digital copy of the proposed subdivision section and the entire project. The file shall be in AutoCAD .DWG or .DXF or other compatible file format as specified by staff, and submitted on a CD-ROM or DVD, or other format specified by staff from the Planning Department. All data shall be based upon the Tennessee State Plane coordinate system, Zone 5301, FIPS Zone 4100, NAD 83 datum. Digital copies of the plat must be received by staff before it may be recorded.

(2) Major Subdivision:

- a. Attend the required preliminary meeting with City staff.
- b. Submit the concept development plan or preliminary plan, where applicable to the Planning and Codes Department for initial review and comment by the Planning Commission (optional). Refer to Article Three of these Regulations.
- c. Submit a completed application, required fees and five copies of the preliminary plan to the Planning and Codes Department for review.
- d. Review and address comments provided by the Planning and Codes Department.

- k. If Planning Commission review is required, a representative acting on behalf of the property owner must attend the meeting to conduct a presentation and answer questions regarding the proposal.
- e. Make any necessary revisions to the preliminary plan and submit updated plan to the Planning and Codes Department. The revised submittal shall include a traffic impact study, based upon the requirements of Section 78-21 of the Brentwood Zoning Ordinance.
- f. Prepare a full set of construction drawings as specified in these Regulations, and submit three copies to the Engineering Department and all applicable utility providers. Refer to Article Four of these Regulations.
- g. Receive and address staff comments, resubmit revised construction plans (multiple submissions may be necessary).
- h. Schedule Pre-Construction Conference with the Engineering Department.
- i. Install erosion and siltation control, and tree protection measures and request inspection by staff from the Engineering Department.
- j. Pay the applicable fee and receive the approved grading permit.
- k. Begin construction, following approved construction drawings.
- l. Prepare final plat for submission to the Planning Commission, following specifications outlined in these Regulations. A final plat may not be submitted until all streets have been constructed to the sub-grade elevation, and minimum required improvements have been inspected for compliance. The final plat will not be signed by City staff for recordation until it meets all the requirements of these Regulations. Refer to Article Five of these Regulations.
- m. Obtain all required certifications, post the required security, and record the final plat with the County Register's office.
- l. Provide staff from the Planning and Codes Department a mylar copy of the recorded plat showing the "Recorders Information" seal on the face of the plat. The mylar copy must be received before building permits will be issued for the project.
- m. Provide planning staff with a digital copy of the proposed subdivision section and the entire project. The file shall be in AutoCAD .DWG or .DXF or other compatible file format as specified by staff, and submitted on a CD-ROM or DVD, or other format specified by staff from the Planning Department. All data shall be based upon the Tennessee State Plane coordinate system, Zone 5301, FIPS Zone 4100, NAD 83 datum. Digital copies of the plat must be received by staff before it may be recorded.

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ARTICLE THREE. PRELIMINARY PLAN.

3.1 Concept Development Plan.

Prior to formal submission of a detailed preliminary plan, the applicant may submit a concept development plan to the Planning Commission for initial review and comment. The purpose for review of a concept development plan is to provide guidance regarding the design of the proposed project before the applicant makes a significant financial investment in detailed professional design work. Submittal of the plan shall be for informational purposes only and shall be non-binding, except in the case where the subject property is zoned OSRD. In no event shall positive guidance from the Planning Commission be construed as official endorsement or approval of the plan.

A concept development plan is not as detailed as a preliminary plan, but it must provide enough information to determine if a proposed project meets the technical requirements of all applicable ordinances for a given tract. City staff will determine the information required based upon the location of the proposed project.

3.2 Filing and Review of Preliminary Plan.

Any person proposing to subdivide land shall submit five (5) prints of the preliminary plan to the Planning and Codes Department. Electronic copy of the submission shall also be provided in the format specified by the Planning and Codes Department. Should the subject property be zoned Open Space Residential Development (OSRD) the submitted preliminary plan shall be based upon the OSRD or OSRD-IP Development plan as approved by the Board of Commissioners.

Review of the proposed preliminary plan shall be scheduled for the first available meeting agenda of the Planning Commission in accordance with the adopted schedule of meetings and submittal deadlines. In accordance with T.C.A. section 13-4-304, submittal deadlines will be established so that a plan filed as required by this section shall be placed on the Planning Commission's agenda within thirty (30) days of the filing or the next regularly scheduled Planning Commission meeting after the thirty-day period. The applicant may waive this time frame requirement for the appearance of the plat on the agenda. City staff shall verify that any preliminary plan meets the minimum standards of these Regulations prior to its submission for formal Planning Commission consideration. For purposes of this section and T.C.A. section 13-4-304, a preliminary plan shall not be considered to have been "filed" unless it meets the minimum standards of these Regulations.

Review of the proposed preliminary plan shall be scheduled for the first available meeting agenda of the Planning Commission in accordance with the adopted schedule of meetings and submittal deadlines, provided that City staff shall verify that any preliminary plan meets the minimum standards of these Regulations prior to its submission for formal Planning Commission consideration.

3.3 Preliminary Plan, Scale and Size.

Preliminary plans shall be drawn to a scale of one (1) inch equals one hundred (100) feet (1 $^{"}$ =100 $^{"}$), on sheets at least twenty-four (24) inches by thirty-six (36) inches (24 $^{"}$ x 36 $^{"}$). The use of an appropriate smaller scale for an overall plan sheet is permitted for projects larger than one acre. When more than one sheet is required, an index sheet of the same size shall also be filed showing the entire subdivision with the sheets lettered in alphabetical order as a key.

3.4 Dedication of Additional Right-of-Way for Existing Streets.

The developer of a proposed subdivision may be required to dedicate additional right-of-way for that portion of the street frontage necessary to comply with the minimum requirements of the Major Thoroughfare Plan. If a shift of the right-of-way is required to improve the alignment, a greater portion of the right-of-way shall be dedicated. The exact width and configuration of the dedication shall be determined by staff from the Engineering Director or his designee.

3.5 Preliminary Plan Contents.

Refer to Article Six of these Regulations for detailed construction design standards. The preliminary plan shall show:

- (1) The proposed name of the subdivision, as approved by the City, the address(es) of the owner or owners; and the name of the designer of the plan, who shall be a qualified engineer, landscape architect or surveyor licensed by the State of Tennessee.
- (2) The proposed names of all internal streets. Two (2) prints of the proposed preliminary plan showing the street names shall be submitted for review and approval by the Williamson County Department of Emergency Communications before submission of the preliminary plan for Planning Commission review (also see Article 3.6 of these Regulations regarding street names).
- (3) A location map of the subdivision shall be shown on the preliminary plan indicating the area within a 1,000-foot radius of the proposed subdivision boundaries. The location map shall show the relation of the subdivision to well-known streets, railroads and watercourses in all directions. The suggested scale of the location map is one inch equals 1,000 feet (1"=1,000').
- (4) Date, graphic scale and approximate north arrow, with north to be at top of the sheet.
- (5) The location of existing and platted property lines, existing streets, buildings, watercourses, railroads, cemeteries, sewer lines, bridges, culverts, drain pipes, water mains, fire hydrants, street lights, tree masses, public utility easements.
- (6) The location of all significant historic and archeological features and structures located on the affected property or within 500 feet of the boundary of the affected property. Any proposed development plan for the affected tract shall also be guided by the principles and standards contained within the publication, "Saving the Farmstead" (a publication of the Heritage Foundation of Franklin and Williamson County dated December 1996.) Refer to Section 78-15 of the zoning ordinance.
- (7) The present zoning classification and zoning overlay district (if any) for the land to be subdivided and on the adjoining land, and the names of the adjoining property owners or subdivisions.
- (8) The bearing and distance of one of the corners of the boundary of the subdivision to the nearest intersection of existing streets and to a corner of the original survey of which it is a part.
- (9) Plans of proposed utility layouts (sewer lines and manholes, water lines and fire hydrants).

- (10) The locations and dimensions of proposed streets, right-of-way dedications, alleys, easements, parks and other open spaces, waterway natural areas, reservations, lot lines, building setback lines, utilities, and all required public utility and drainage easements.
- (11) As determined by staff from the Engineering Department, an applicant may be required to provide a traffic impact study to determine the potential impact of any proposed development on the existing traffic network and/or the effects of traffic system improvements and alterations proposed by the applicant on the existing network. All traffic impact studies shall comply with applicable policies and standards established by the City. Refer to Sections 78-21 and 78-484 of the zoning ordinance.
- (12) Topographic contours at vertical intervals of not more than two (2) feet and identification of all natural steep grades, differentiated between those grades from fifteen percent to twenty-five percent (15%-25%) and those grades in excess of twenty-five percent (25%+).
- (13) The acreage of the land to be subdivided.
- (14) A lot size table and the appropriate open space calculations.
- (15)The proposed location and layout of any planned amenities/and or entrance features for the project (clubhouse, pool tennis courts, walking trails, etc). In subdivisions where amenity including entrance features have been proposed developer/subdivider or approved as a part of an Open Space Residential Development (OSRD) project, they shall be shown schematically as part of the preliminary plans using a separate plan sheet. The plan shall include itemized cost estimates for the improvements provided. The amenity/entrance feature improvements and related site plans shall be considered by the Planning Commission in conjunction with approval and recording of the final plat for the first section of the subdivision. In addition, the developer/subdivider shall also provide adequate security, in a form acceptable to the City, to cover the cost of the amenity improvements before the first section of the subdivision is recorded. All amenity/entrance feature improvements shall be initiated and completed before building construction is completed on fifty percent (50%) of the total building lots in the subdivision.
- (16) The proposed location and layout of any planned amenities for the project (clubhouse, pool, tennis courts, walking trails, etc.)
- (17) Plans setting out the grades or profiles of the streets, the proposed type and character of all improvements, and proposed development phasing.
- (18) Subsurface conditions on the tract if required by City staff. The report shall be produced by a qualified geotechnical engineer licensed to practice in the State of Tennessee.
- (19) If any portion of the land proposed for subdivision lies within a floodable area (i.e. floodplain or floodway) as determined by an official Flood Study Map or special flood study as required by the Director of Engineering or his designee, that portion shall be so indicated with its elevation annotated on the preliminary plan. If not within a floodable area, the following note certifying such must be added to the preliminary plan: "The property described on this plan does not lie within an area of Special Flood Hazard as delineated on the current Flood Insurance Rate Map, prepared by the Federal Emergency Management Agency (FEMA), Community Panel Number: ________, revised: _______."

- (20) Provide a copy of the Certificate of Availability from the appropriate utility companies (electric, gas, water, sewer etc.) acknowledging that service will be provided to the proposed project.
- (21) The approximate size and location of all proposed detention ponds and water quality features.
- (22) The proposed construction phase boundaries and lot numbering scheme.
- (23) Any sinkholes on the subject property as identified by a qualified geo-technical Engineer shall be located and appropriately labeled on the preliminary plan. The plan shall be configured to locate all sinkholes in permanent open space only and not within any buildable lots. Sinkholes in the permanent open space shall be protected from natural and/or man-made debris.
- (24) The preliminary plan for a proposed subdivision shall identify all areas affected by the Hillside Protection Overlay as detailed within Division 14 of the Zoning Ordinance.
- (25) Special designations, encumbrances and/or restrictions for all lots, including but not limited to the Lowest Floor Elevation (LFE), grinder pump requirement (GP), Hillside Protection Overlay(HP), transitional lot designation (*), and floodway/floodway fringe areas.

3.6 Street Names.

The naming of the streets within a proposed subdivision shall be the responsibility of the developer. All proposed street names must be approved by the Williamson County Department of Emergency Communications before submission of the preliminary plan to the Planning Commission. Following staff review and recommendation, the Planning Commission shall have final authority to approve or disapprove the names of all streets appearing on the final plat. General requirements for the naming of streets include:

- (1) Proposed streets, which are in alignment with others already existing and named, or which are intended eventually connect, shall bear the names of those existing streets.
- (2) Street names shall not duplicate, be spelled the same as, or too closely approximate, phonetically or otherwise, the name of any other streets within the City of Brentwood or Williamson County, except as set forth in the above subsection.
- (3) In no instance shall the use of a different street type (street, lane, drive, way, court, etc.) constitute a unique name. Example: East Street and East Drive are not unique names, and therefore shall not be used on the same plan.
- (4) Proposed street names shall contain no more than 24 characters, excluding spaces and the proposed street types.
- (5) No punctuation or other special characters shall be used in street names.
- (6) Street names shall not contain more than three words, not including directional and street type.
- (7) Street names and types shall be carried, without change, across intersections.
- (8) Directional suffixes shall not be used on circular streets.

All proposed street names shall be submitted for staff approval and shown on the preliminary plan. Upon final approval of the preliminary plan, staff from the Brentwood Fire Department shall assign all street addresses prior to the recordation of the final plat. On corner lots in residential districts, the assigned address shall be the street where the front of the residence is located, or if the house is angled on the lot, the location of the main driveway.

3.7 Corrected copies of the Preliminary Plan

Upon Planning Commission approval of a preliminary plan, two (2) complete copies of the revised plan that addresses all conditions of approval and shows any other necessary revisions shall be provided to the staff of the Planning and Codes Department within 60 days of the Planning Commission action.

3.8 Approval or Disapproval of a Preliminary Plan.

Within sixty (60) days after initial consideration of the preliminary plan, the Planning Commission will indicate approval, disapproval or approval subject to some modification; otherwise the preliminary plan shall be deemed approved and a certificate to that effect shall be issued by the Planning Commission, on demand. If a preliminary plan is disapproved, reasons for such disapproval shall be stated in writing. The applicant for a preliminary plan approval may waive the time requirement set in this section and consent to an extension or extensions of the applicable time period. Furthermore, the time requirement set in this section may be adjusted for holidays or unexpected interceding events that close City offices as provided for in T.C.A. Section 13-4-304. Any revised preliminary plans approved by the Planning Commission shall supercede any previously approved plans.

3.9 Approval Not to Constitute Approval of the Final Plat.

The approval of the preliminary plan by the Planning Commission shall not constitute acceptance of the final plat. A final plat based upon the approved preliminary plan shall be submitted for review and approval separately.

3.10 Duration of Approval.

Planning Commission approval of a preliminary plan shall remain valid for a period of **two** years, from the date of the approval, provided a final plat based thereon is approved by the Planning Commission and recorded within twenty-four (24) months from the date of the preliminary plan approval. When a final plat based upon the preliminary plan is recorded, the term of the preliminary plan shall be extended by an additional twelve 12 months. The additional time period shall be calculated from the date of the final plat recording.

Should a plat not be recorded within the original 24 month approval period, an extension of the approval of the preliminary plan may be applied for by the owner and granted by the Planning Commission for up to twelve (12) additional months, after, which the plan must be submitted for approval again and shall be subject to the current rules and regulations as though no previous plan had been submitted.

3.11 New Plan - When Permitted or Required.

If a plan is approved, or approved subject to modifications, and the subdivider desires to make substantial modifications as determined by the Planning and Codes Director, other than those already required by the Planning Commission, a new preliminary plan must be submitted for consideration. If a plan is disapproved, resubmission shall conform with the requirements of Section 78-41 of the Brentwood Zoning Ordinance. The preliminary plan may only be resubmitted after one year has passed since the denial; or

when the reasons for the denial have been resolved by adopted changes to the Code; or when the Planning Commission directs the Planning and Codes Director to accept a new application.

ARTICLE FOUR. CONSTRUCTION DRAWINGS/RECORD DRAWINGS.

4.1 Construction Drawings -- Generally.

The design and preparation of construction drawings for new infrastructure within residential or commercial subdivisions shall be completed following approval of the preliminary plan. Construction drawings must be prepared by a licensed engineer (see Appendix Two for detailed requirements and typical checklist for construction drawings). All new infrastructure proposed in subdivisions shall comply with the technical requirements of this section unless an exception is granted by the Planning Commission. The City's Engineering Department coordinates review and approval of construction drawings. Please note that a final plat for a subdivision cannot be submitted until the construction drawings are approved, and construction has progressed to a point where all streets are at the design sub-grade elevation. Refer to Article Five of these Regulations for detailed requirements for submitting a final plat.

4.2 Submission of Construction Drawings and Construction of Infrastructure.

Because every site is unique, the developer shall meet with staff from the Engineering Department prior to beginning detailed design. Issues such as the location of detention areas, requirements for any off-site improvements, construction traffic routing, construction sequence, protection of non-disturbance or buffer areas, and other special concerns will be discussed and addressed in advance.

The following outline identifies the primary steps in the construction drawing approval process, and the initiation of construction:

- (1) Schedule a preliminary meeting prior to drafting the construction drawings with the Engineering Department.
- (2) Prepare draft set of construction drawings and deliver three (3) copies to staff of the Engineering Department, following the requirements of these Regulations.
- (3) Address comments relative to the construction drawings as provided by staff from the Engineering Department (multiple submissions may be necessary).
- (4) Concurrent with the engineering review, coordinate review of the utilities design with the appropriate utility providers.
- (5) Submit five (5) copies of the final approved set of construction drawings, including complete utility plans to staff of the Engineering Department.
- (6) Prior to the start of construction, the developer or his agent shall contact staff from the Engineering Department staff to schedule a pre-construction meeting. Representatives of the developer, contractor and certified erosion control inspector must be present. At this meeting, the developer shall submit all required Federal, State, and local permits to begin construction for streets and utilities. Non-compliance with this notification requirement may be sufficient cause for rejection of any work performed.
- (7) Install erosion/siltation control per the approved erosion/siltation control plan; install the construction entrance, tree protection (if applicable) and stream buffer or non-disturb area protection.
- (8) Request inspection of the erosion control measures from staff of the Engineering Department.

- (9) Pay grading permit fee and receive grading permit.
- (10) Commence active construction in accordance with the approved construction drawings (note that approval by the Engineering Department does not constitute approval of the utility design). Refer to Article Seven of these Regulations, regarding Construction Standards.
- (11) Engineering inspectors will routinely be on-site throughout construction; refer to Article 7.8 for detailed information on construction monitoring and inspections.

4.3 Construction Etiquette.

The contractor shall properly plan and coordinate all construction activities. Building operations, construction hours and routes shall be planned to minimize disturbance to the adjacent residences and businesses. Refer to Section 42-137(8) of the Municipal Code regarding construction hours.

4.4 Revisions of Construction Drawings after Commencing Construction.

Unexpected conditions and changes in subdivision layout and infrastructure are common. When changes to the approved drawings are necessary or desired, the developer shall consult with staff from the Engineering Department prior to making any such changes. Failure to do so can result in additional cost, disapproval or extended review times. Any changes to approved construction plans may require review and approval by the Planning Commission and/or the Board of Commissioners.

4.5 Record Drawings.

The developer is responsible for the submittal of the record drawings of the subdivision infrastructure improvements, including:

- (1) Storm drainage.
- (2) Water and fire hydrants
- (3) Sanitary sewer lines and manholes.
- (4) Streets.
- (5) Above ground electrical facilities.
- (6) Street lighting.
- (7) Floodway and Floodway Fringe areas.

The record drawings shall be submitted to the Engineering, Water and Sewer, and Public Works Departments upon completion of work and prior to the release of letters of credit securing individual sections of the project associated with the recordation of the final plat. The drawings shall be provided in AutoCAD.DWG or .DXF or other compatible file format as specified by staff, and submitted on a CD-ROM or DVD, or other format specified by staff from the Planning Department. All data shall be based upon the Tennessee State Plane coordinate system, Zone 5301, FIPS Zone 4100, NAD 83 datum.

ARTICLE FIVE. FINAL PLAT.

5.1 Final Plat. General.

The final plat shall conform substantially to the approved preliminary plan. Developers of phased subdivision projects with projected future lots in excess of ten (10) lots are required to submit, sections of the project which contain a minimum of ten (10) lots or a greater number for approval at a time. If in the opinion of the Planning Commission, the public good warrants a larger section to accommodate proper layout of streets, utilities, drainage, and other public improvements a section containing more than ten lots will be considered. Further, water mains, storm sewers, stormwater detention facilities, surface drainage features, trunk sewers, and any sewage treatment plants shall be designed and built to serve the entire area owned by the subdivider or designed and built in a manner that they can easily be expanded or extended to serve the entire area. Sections must be identified numerically following the name of the subdivision as initially submitted or as approved on the preliminary plan. The final plat shall be prepared by a land surveyor registered by the State of Tennessee.

5.2 Submission Deadline and Provided Copies.

The subdivider shall submit five (5) paper copies of the proposed final plat following the submission deadline schedule published by the Planning and Codes Department. Electronic copy of the submission shall also be provided in a format as specified by staff from the Planning and Codes Department. The final plat shall be accompanied by an application form, which shall identify the developer and all persons having any financial interest in the proposed subdivision, and the required review fees. The Planning and Codes Director shall verify that any final plat meets the minimum standards of these Regulations prior to its submission for formal Planning Commission consideration. The necessary forms and a calendar of meeting dates can be found on the City's web site – www.brentwood-tn.org.

5.3 Time Limit for Approval or Disapproval -- Duration of Approval.

Within sixty (60) days after initial consideration of the final plat, the Planning Commission will indicate approval, disapproval or approval subject to some modification; otherwise the final plat shall be deemed approved and a certificate to that effect shall be issued by the Planning Commission, on demand. If a final plat is disapproved, reasons for such disapproval shall be stated in writing. The applicant for a final plat approval may waive the time requirement set in this section and consent to an extension or extensions of the applicable time period. Furthermore, the time requirement set in this section may be adjusted for holidays or unexpected interceding events that close City offices as provided for in T.C.A. Section 13-4-304. Planning Commission approval of any final plat shall be effective for one year during which time the subdivider shall complete any measures required for final certification of the completion of improvements according to these Regulations. An expired final plat may be resubmitted by the subdividor for Planning Commission review and approval, but shall be subject to revision to conform to the ordinances and regulations in place at the time of resubmittal.

5.4 Approval Not to Constitute Acceptance of Streets.

Approval of the final plat by the Planning Commission shall not be deemed to constitute or imply the acceptance by the Board of Commissioners of any public rights-of-way as shown on the final plat.

5.5 Improvements Required Before Recordation of the Final Pat

The following improvements shall be completed within each subdivision or section thereof before the approved final plat may be signed for recording.

- (1) Grade and improve all lots, streets and alleys.
- (2) Installation of the street base per the requirements of these Regulations.
- (3) Installation of all curbs and gutters, per the requirements of Section 7.4(3) of these Regulations.
- (4) Installation of the binder course, per the requirements of these Regulations.
- (5) Installation of all required drainage/stormwater infrastructure, as shown on the approved construction plans.
- (6) Installation of all sewer and water infrastructure, per City of Brentwood construction specifications.
- (7) Installation of all required monuments.
- (8) Any special conditions as required as part of the approval granted by the Planning Commission.
- (9) Installation of temporary or permanent street name and other traffic regulatory signage.
- (10) Installation of bikeways, pedestrian accessways, walking paths, or other improvements approved by the City of Brentwood as part of a preliminary plan that are adjacent to or behind lots included in the section or phase proposed for platting. This requirement does not apply to sidewalks in the right-of-way (or adjacent to the right-of-way) that the future home builder will be required to construct before issuance of a certificate of occupancy.
- (11) Detailed plans for any proposed amenity and/or entrance feature improvements and related site plans shall be approved by the Planning Commission concurrent with approval and recording of the final plat for the first section of the subdivision.

Satisfactory completion of the above improvements must be verified and approved by staff from the Engineering Department.

5.6 Final Plat Specifications.

The approved final plat shall be drawn at a scale of one (1) inch equals one hundred (100) feet (1" = 100') on paper sheets eighteen (18) inches by twenty-four (24) inches (18" x 24"). The use of an appropriate alternate scale is permitted for projects larger than one acre. When more than one sheet is required, an index sheet of the same size shall also be filed showing the entire subdivision, with the sheets numbered in numerical order as a key, and referencing the appropriate project information. Alternate scales may be submitted for review in advance of submission for approval by Planning and Codes Department staff.

The final plat shall show:

- (1) The date, title, name and location of the subject subdivision, graphic scale, and true north point.
- (2) The lines of all streets and rights-of-way; the size and location of any water mains, hydrants, sewer mains, manholes and other improvements; storm drains, catch basins, and other stormwater detention facilities; reservations for sidewalks, easements, and any areas to be dedicated to public use; alley lines, lot lines, building setback lines, and a building setback table; lots numbered in numerical order with individual address blocks; and any sites for other than residential use with notes stating their purpose and any limitations.
- (3) Sufficient data to determine readily and identify on-site the location, bearing, and length of every street line, lot line, boundary line, block line, and building line whether curved or straight. This shall include the radius, central angle, chord length, and tangent distance for the centerline of curved streets and curved property lines.
- (4) All dimensions to nearest one hundredth (100th) of a foot and angles to the nearest degree, minute, and second.
- (5) The location and description of survey markers, benchmarks, and elevations.
- (6) The names, locations, and zoning classifications of adjoining subdivisions and streets, and the location and ownership of adjoining unsubdivided property.
- (7) Vicinity map showing site in relation to an area within a 1000-foot radius of the proposed subdivision boundaries.
- (8) If any portion of the land being subdivided lies within a floodable area (i.e., floodplain or floodway) as determined by an official Flood Study Map, or special flood study as required by the Director of Engineering or his designee, that portion shall be so indicated with its elevation annotated on the plan. If not within a floodable area, the follow note certifying such must be added to the final plat: "The property described on this final plat does not lie within an area of Special Flood Hazard as delineated on the current Flood Insurance Rate Map, prepared by the Federal Emergency Management Agency (FEMA), Community Panel Number _______, revised: _______."
- (9) The LFE (Lowest Floor Elevation) for any lots shown to be within a flood hazard area as determined by a special flood study as required by the Director of Engineering or his designee.
- (10) Approved street names as approved by the Williamson County Department of Emergency Communications (also see Section 6.8 regarding street names).
- (11) Special designations, encumbrances and/or restrictions for all lots, including but not limited to the Lowest Floor Elevation LFE, grinder pump requirement (GP), hillside protection (HP), transitional lot designation (*), and floodway/floodway fringe areas.
- (12) A reference to the Performance Agreement and its location within the public records where it is recorded shall be included on the face of the plat.

5.7 Accompanying Certificates.

The following certificates shall be included as part of the final plat:

- (1) **Certificate of Ownership and Dedication** -- showing that applicant is the landowner and dedicates streets, rights-of-way, and any sites for public use (Appendix Three, Form 1).
- (2) **Certificate of Approval of Street Names** -- certifying that the Williamson County Office of Emergency Communications has approved the proposed street names (Appendix Three, Form 2).
- (3) **Certificate of Approval of Subdivision Name** certifying approval of subdivision names by the City of Brentwood (Appendix Three, Form 3).
- (4) **Certificate of Accuracy** signed by a surveyor licensed to practice in the State of Tennessee, and certifying the accuracy of the survey and final plat and placement of monuments (Appendix Three, Form 4).
- (5) **Certificate of Approval of Water and Sewer Systems** signed by an authorized official verifying that the utilities, private or otherwise, have been installed in accordance with system requirements (Appendix Three, Form 5).
- (6) **Certificate of Provision of Electrical Service** certifying that the franchised electric provider has agreed to provide electrical service to the project (Appendix Three, Form 6).
- (7) **Certificate of Approval of Streets** signed by the appropriate official, certifying that the subdivider has complied with one of the following alternatives:
 - a. Installation of all improvements in accordance with the requirements of these Regulations (Appendix Three, Form 7), or
 - b. Posting of security acceptable by the City in sufficient form and amount to assure such completion of all required improvements.
- (8) **Certificate of Approval for Recording** -- signed by the Secretary of the Planning Commission or the Planning and Codes Director (Appendix Three, Form 8).

5.8 Security.

Security in a form and amount acceptable to City staff to insure the completion of the remaining improvements shall be provided with the recording of the final plat in accordance with Article Eight of these Regulations. The required security shall be submitted to Planning & Codes Department staff when the approved final plat is submitted for signatures. The security shall be in the amount determined by City staff to assure completion of streets and other infrastructure work as shown on the approved construction plans.

5.9 Disposition of Original Copy.

The approved final plat shall be produced by the subdivider on four (4) mil reproducible mylar film for assembly of the required certification signatures, and filing with the Williamson County Register of Deeds as the official final plat of record. The property owner or developer shall be responsible for recording the approved final plat with the Williamson County Register of Deeds, upon receipt of all required signatures.

One recorded copy of the final plat mylar shall be delivered to Planning Department staff before any permits will be issued for the project.

5.10 Acceptance of Streets and Associated Infrastructure.

Dedication of public rights-of-way, land, and improvements to the City of Brentwood shall be accomplished via recordation of a final plat, unless City staff determines that a separate legal instrument is appropriate. Acceptance of completed street improvements shall be accomplished by resolution of the Board of Commissioners, after review and recommendation by staff from the Engineering Department.

Initial acceptance of completed street improvements by the Board of Commissioners shall occur after the final topping is applied on the internal streets within a given project. A maintenance period shall begin with this acceptance. The final acceptance of all improvements by the City shall not occur until the maintenance period concludes and follow-up inspections have been performed by City staff or an authorized representative to insure that the improvements comply with the approved construction documents. Upon passage of the follow-up inspection(s) the City will officially release all securities being held for the improvements. Upon completion of the required maintenance period, and correction of any identified deficiencies, all improvements other than streets shall be considered officially accepted for maintenance by the City. Refer to Article Seven of these Regulations for infrastructure requirements that must be completed before final acceptance of the streets within a subdivision or section thereof.

26

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ARTICLE SIX. DESIGN STANDARDS.

6.1 Streets - Generally.

The layout of streets in a subdivision shall conform to existing regulations and policies, and shall be based on a thorough consideration of:

- (1) Topography and drainage.
- (2) All new streets shall be constructed a minimum of one foot above the base flood or 100-year floodplain elevation.
- (3) Public convenience and safety.
- (4) Existing street pattern and future development of adjacent tracts.
- (5) Proposed uses of land being subdivided.

6.2 Street Design

The following design requirements shall apply to all publicly and privately maintained streets.

(1) **Crowns.** All pavement surfaces shall drain adequately. If the pavement surface is not super elevated, the crown shall be a minimum two percent (2%) cross slope measured from the roadway centerline to the edge of pavement.

(2) Grades.

- a. Grades on arterial streets shall not exceed seven (7) percent.
- b. Grades on collector streets may exceed seven (7) percent, but not more than nine (9) percent for up to four hundred (400) feet in length measured in the location where the maximum grade is exceeded.
- c. Grades on local streets may exceed seven (7) percent, but not more than twelve (12) percent for up to four hundred (400) feet in length and thirteen (13) percent for up to two hundred (200) feet in length.
- d. For proper drainage, the minimum grade on any street shall be one (1) percent.
- e. On local streets, the Planning Commission may grant a variance in grades (up to a maximum of 15% for 200 feet) consistent with the intent of this section for environmental considerations including but not limited to tree protection and minimization of site disturbance provided that in the opinion of staff from the Engineering Department, such grade does not pose a safety problem for the public.
- (3) **Horizontal and Vertical Curves.** Horizontal and vertical curves shall comply with the design standards set for in the American Association of State Highway Transportation Officials' Policy for the Geometric Design of Highway Systems, latest edition. Arterial streets and highways except through residential subdivisions should meet a calculated 40 mile per hour (mph) minimum design speed. Designated arterial streets in residential subdivisions, collector and commercial/service institutional streets should meet a calculated 35 mile per hour (mph) minimum design speed. Minor residential, marginal access and dead end streets shall meet a calculated 30 mile per hour (mph) design speed.

Generally a horizontal curve in a street sixty (60) feet in width shall have a centerline radius of curvature of not less than three hundred (300) feet: on other streets, not less that one hundred (100) feet.

Vertical curves shall be designated with the following K-values, for a 30 mph design speed, crest vertical curve K-value of 30; sag vertical curve, K-value of 40. The City may allow lower K-values when justified for environmental considerations including but not limited to tree protection and minimization of site disturbance provided that in the opinion of the City Engineer, such grade does not pose a safety problem for the public; however, the City will not allow K-values less than 24 for crest curves and 31 for sag vertical curves.

(4) **Intersections.** All streets shall intersect at a ninety (90) degree angle. The minimum length of the intersecting streets at a 90 degree angle shall be 100 feet for local streets and 300 feet for arterial, collector, and commercial/service institutional streets. Property line radii at street intersections shall not be less than twenty five (25) feet.

The subdivision developer shall clear a sufficient area at each intersection to ensure adequate vehicle sight distance of not less than two hundred (200) feet on local streets and two hundred seventy-five (275) feet on all collector and arterial streets.

- (5) **Tangents**. A tangent of at least one hundred (100) feet in length shall be introduced between reverse curves on arterial and collector streets.
- (6) **Street Jogs**. Street jogs with centerline offsets of less than one hundred twenty-five (125) feet shall not be allowed.
- (7) **Traffic Calming.** Traffic calming should be an important consideration when designing residential streets. The design should seek to inherently calm traffic by incorporating curves, intersections and avoiding long straight sections of roadway. When inherent design is not adequate the designer may choose to or be required to incorporate other traffic calming features such as roundabouts (refer to Section 6.5 of these Regulations), speed humps (meeting the City of Brentwood's policy), speed tables or central islands. When no specific guidance is presented herein for a planned traffic calming measure the City will rely on other widely accepted industry standards. The specifications for all traffic calming measures shall comply with applicable standards as established by the City. Refer to the currently adopted policies regarding the installation of speed humps as adopted via Resolutions 95-35 and 97-14 or later subsequent adoptions.

In commercial areas the street layout should consider accessibility by larger vehicles such as tractor-trailers and other vehicles requiring longer turning radii.

(8) Blocks.

a. **Length**. Blocks shall not be less than six hundred (600) feet nor more than twelve hundred (1,200) feet in length, except as the Planning Commission considers necessary due to the topography of the land or desired features of street pattern. On streets with long block length, the Planning Commission may require pedestrian cross walks or bikeways to link adjoining or parallel roads with dedicated easements or right-of-way dedication at locations deemed necessary to ensure safe and efficient movement of people within the subdivision.

b. **Width**. Blocks shall be wide enough to allow two (2) rows of lots, except where reverse frontage on major thoroughfares is provided or where prevented by topographical conditions or size of the property; in which case the Planning Commission may approve a single row of lots of minimum depth.

6.3 Street Right-of-Way Widths.

The vehicle access control regulations of the Zoning Ordinance and the Major Thoroughfare Plan identify all collector and arterial streets within the City of Brentwood. All streets formally accepted for perpetual maintenance by the City and not designated as a arterial or collector street shall be considered local streets.

(1) Minimum pavement thickness designs:

TABLE ONE PAVEMENT SECTION DESIGNS

Street Designation	Material Aggregate Base (Inches)	Bituminous Plant Mix Base (Inches)	Asphaltic Concrete Wearing Surface (Inches)
Arterial Streets & Highways	8.0	5.0	2.0
Collector Streets	8.0	3.0	2.0
Local Residential Streets	8.0	3.0	2.0
Commercial or Service Institution Streets	8.0	5.0	2.0

The minimum width of the right-of-way as measured from lot line to lot line shall be no less than as follows:

- (2) **Arterial Streets** The minimum width of the right-of-way is 90 feet. Additional right-of-way may be required for turn lanes, deceleration lanes, medians, sidewalks, and bikeways. Public utility and drainage easements are required outside the right-of-way limits for the extension of utilities and drainage infrastructure.
- (3) **Collector Streets** The minimum width of right-of-way is 60 feet. Public utility and drainage easements are required outside the right-of-way limits for the extension of utilities and drainage infrastructure.
- (4) **Local Streets** The minimum width of the right-of-way is 50 feet. Public utility and drainage easements are required outside the right-of-way limits for the extension of utilities and drainage infrastructure.
- (5) **Dead-End Streets (Cul-de-Sac)-Residential** The minimum radius of the right-of-way is 50 feet, and the radius of the edge of pavement is 35 feet, or 37 feet to face of curb. The maximum length of a dead-end street shall be 1,000 feet, as measured from the end of the cul-de-sac to the radius return of the curb line of the last intersecting street. Public utility and drainage easements are required outside the right-of-way limits for the extension of utilities and drainage infrastructure. If a landscaped island is proposed within a cul-de-sac

the overall diameter of the cul-de-sac and the central island must meet the requirements for roundabouts (refer to Article 6.5 of these Regulations).

- (6) **Dead-End Streets (Cul-de-Sac)-Commercial/Service Institution** The minimum radius of the right-of-way is 60 feet, and the radius of the edge of pavement is 40 feet. Public utility and drainage easements are required outside of right-of-way limits for the extension of utilities and drainage infrastructure. If a landscaped island is proposed within a cul-de-sac the overall diameter of the cul-de-sac and the central island must meet the requirements for roundabouts (refer to Article 6.5 of these Regulations).
- (7) **Commercial/Service Institution Streets** The minimum width of the right-of-way is 60 feet. Public utilities and drainage easements are required outside the right-of-way limits for the extension of utilities and drainage infrastructure.
- (8) **Open Space Residential Development Innovative Project** Refer to Article 6.11 of these Regulations for specific standards regarding streets within this zoning district.
- (9) **Historic Rural Development Standards** -- Please refer to Article 6.12 of these Regulations for specific standards regarding streets within these designated areas.

6.4 Street Pavement Sections.

Minimum pavement widths shall be as follows. All stated widths do not include the width of the required curb and gutter.

(1) **Arterial Streets** – Widths will vary based upon the standards set forth in the Major Thoroughfare Plan.

(2) Collector Streets

- a. **Residential** 30 feet wide, provided that the width of a residential collector street connection to an arterial street at the tie-in point shall be 36 feet for a minimum length of 75 feet, plus an additional 75-foot transition pavement width back to the standard pavement section of 30 feet. The radius of the curb returns shall be a minimum of 30 feet to provide adequate turning movements. When a residential collector street connects to an existing street that incorporates a bike route or the new street is deemed to provide a desirable bike route connection the developer may be required to stripe the new collector with a centerline, edge lines establishing 11' driving lanes and 4' bike lanes on each side.
- b. **Commercial** 36 feet wide.
- c. **Service Institution** 36 feet wide.
- (3) **Local Streets** 22 feet wide.
- (4) **Dead-End Streets, Residential** (Cul-de-Sac) 35-foot radius.
- (5) **Dead-End Streets, Commercial** (Cul-de-Sac) 40-foot radius.
- (6) **OSRD-IP Sections** Refer to Article 6.12 of these Regulations.

(7) **Historic Rural Development Sections --** Refer to Article 6.13 of these Regulations.

6.5 Curbs and Gutters.

Within all developments, the developer shall provide six-inch concrete curb with a 24-inch concrete gutter, and under drains shall be required (refer Appendix Two, Drawings 6 and 7). A four-inch perforated plastic drainpipe shall be installed under any curb and gutter located in cut sections to ensure proper drainage. The drain shall be backfilled with stone and encased with fiber cloth. The drainage pipe shall connect to the storm drain at each box/catch basin. All internal islands shall have a mountable curb (refer to Appendix Two, Drawing 29).

6.6 Roundabouts.

- (1) General. Roundabouts meeting specific design criteria are allowed in residential and commercial subdivisions in the City of Brentwood. Roundabouts are intended to provide a safe means to control traffic at intersections and serve as a traffic calming measure. The design requirements for roundabouts vary, depending on the street classification and whether it is desirable to have landscaping or other features within the central island. Design standards for each type of roundabout relate to key characteristics and dimensions as pictured in Appendix Two, Drawing 26. There are three types of roundabouts allowed with the City of Brentwood, as follows:
 - a. **Compact.** Roundabouts along local streets are compact roundabouts. The entire raised central island is mountable at low speeds.
 - b. **Urban.** Roundabouts along collector streets or at intersections of collector and local streets are urban roundabouts. The apron portion of the central island is mountable by larger vehicles at low speeds. Landscaping or other features may be placed in the central island.
 - c. **Arterial/Commercial**. Roundabouts along or at the intersection of arterial streets or within a commercial subdivision are arterial/commercial roundabouts.

The following subsections provide detailed specifications and geometric requirements for each roundabout type.

(2) **Compact Roundabouts.** No features, signage, lighting or obstructions of any kind shall be placed within the central island/apron of a compact roundabout. The entire central island/apron shall be fully mountable at low speeds by larger vehicles and shall be six inches high at the highest point and sloped two percent to six percent for proper drainage. The central island shall be stamped concrete or other approved textured finish in a color contrasting with the street. The design vehicle for compact roundabouts is a large semitrailer (WB-55, as outlined in the American Association of State Highway and Transportation Officials (AASHTO) publication, A Policy On Geometric Design of Highways and Streets). The size, configuration and layout of radii, splitter islands, and any other aspect of the roundabout that are not specified in this document shall be designed in accordance with accepted industry standards such as the Federal Highway Administration Publication No. FHWA-RD-00-06, Roundabouts: An Informational Guide.

TABLE TWO
COMPACT ROUNDABOUT STANDARDS

Central Island Diameter (ft)	Apron Diameter (ft)	Circulatory Street Width** (ft)	Inscribed Circle Diameter* (ft)
30	N/A	19	72
32	N/A	19	74
34	N/A	19	76

^{*} Measured inside of curb to inside of curb, includes 24" wide gutter pans

(3) **Urban Roundabouts.** The design vehicle for urban roundabouts is a large semitrailer (WB-55, as outlined in the AASHTO publication, <u>A Policy On Geometric Design of Highways and Streets</u>. The size, configuration and layout of radii, splitter islands, and any other aspect of the roundabout that are not specified in the document shall be designed in accordance with accepted industry standards such as the Federal Highway Administration Publication No. FHWA-RD-00-06, <u>Roundabouts</u>: <u>An Informational Guide</u>.

TABLE THREE URBAN ROUNDABOUT STANDARDS

Central Island Diameter (ft) Includes Apron	Apron Width (ft)	Circulatory Street Width** (ft)	Inscribed Circle Diameter* (ft)
52	21	18	92
55	16	18	94
58	14.5	18	98
61	13	18	101
65	11.5	18	105
69	10	18	109
74	9	18	114
78	8	18	118

^{*} Measured inside of curb to inside of curb, includes 24" wide gutter pans

- (4) **Arterial/Commercial Roundabouts.** Generally, roundabouts along or at intersections of arterial streets or in commercial subdivisions must be designed in accordance with accepted industry standards such as the Federal Highway Administration Publication No. FHWA-RD-00-067, Roundabouts: An Informational Guide. However, the design and acceptability of roundabouts of this type are subject to evaluation on a case by case basis. The design vehicle for roundabouts in this category shall be an interstate highway semitrailer (WB-20, as outlined in the AASHTO, A Policy on Geometric Design of Highways and Streets), or the largest vehicle expected to use the street whichever is larger. Evaluation and final determination is subject to the approval of the Engineering Director or his designee.
- (5) **Standard Requirements for Roundabouts** The following requirements apply to all roundabouts within the City of Brentwood.

^{**} Pavement width

^{**} Pavement width

- a. Signage for all roundabouts shall comply with the Manual on Uniform Traffic Control Devices (MUTCD).
- b. Street lighting shall be placed at all approaches to roundabouts and in the central island of urban and arterial/commercial roundabouts. The lighting plan must be approved by the Engineering Director, or his designee.
- c. All approaches to all roundabouts shall include raised; fully mountable splitter islands. All splitter islands shall be six-inch high concrete (at the highest point) and a contrasting color to the street.
- d. Aprons of urban roundabouts and the entire central island of compact roundabouts must include fully mountable curbing adjacent to the street and the horizontal surface sloped at two to six percent. The surface of all aprons shall be a contrasting color and texture to the street. The materials used must be of suitable strength and design to support heavy traffic. Aprons constructed of individual pavers or other "loose" forms of surface materials are not allowed.
- e. The 'inscribed circle diameter' for all types of roundabouts is measured inside of curb to inside of curb, including the 24" wide gutter pans.
- f. All roundabouts shall include a standard 30-inch curb and gutter on the outside circumference of the roundabout and be fully mountable curbing on the inside circumference (refer to Appendix Two, Drawing 29 of these regulations).
- g. Where sidewalks are incorporated into the subdivision design, crosswalks shall be provided at each approach to the roundabout. All crosswalks, ramps, markings, and signage shall comply with applicable ADA requirements.
- h. Where unusual topographic conditions or other factors exist that could impact the functional characteristics of a roundabout, the Engineering Director may require review and recommendation by a third-party traffic engineer. If it is determined by the third-party traffic engineer and/or the Engineering Director that a specific location is not a good application for a roundabout, the roundabout will not be approved. Where specific design changes are recommended by the third-party engineer and/or the Engineering Director, the design will be modified accordingly.

6.7 Sidewalks.

With the submission of a new preliminary subdivision plan and/or site development plan, the following sidewalk requirements shall apply (refer to Appendix Two, Drawings 4 and 18 of these Regulations):

- (1) **Arterial and Collector Streets** Sidewalks six feet wide shall be constructed on both sides of the street.
- (2) **Commercial/Service Institution Development** Sidewalks six (6) feet wide shall be constructed in all projects along all public streets abutting the development.
- (3) **OSRD and R-2 Zoning Districts** Sidewalks five (5) feet wide shall be constructed on both sides of all local streets.

- (4) **Other Residential Streets** Sidewalks five (5) feet wide may be required by the Planning Commission on local streets in other residential zoning districts not named in the previous subsection, including mid-block connections between adjoining or nearby streets, if deemed necessary for the safe and efficient movement of pedestrians.
- (5) **Connection to Existing Sidewalks** When sidewalks are required in a subdivision adjoining a developed area with sidewalks, the new sidewalks shall be connected by the subdivision developer.
- (6) **Bikeways** In lieu of sidewalks, bikeways may be installed in accordance with the adopted standards of these Regulations (see Article 7.4(9)) if deemed acceptable by the Planning Commission for the safe and effective movement of pedestrians.
- (7) **Private Streets** Private street subdivisions shall provide sidewalks as shown on the approved preliminary plan.
- (8) **Exemptions** Sidewalks shall not be required in areas where the projected grade of the street will exceed eight percent (8%). In addition, the installation of sidewalks may be delayed in locations where street improvements are scheduled in the City's officially adopted capital improvements program, subject to the developer providing a cash equivalent contribution to the City for future sidewalk installation. Such exemptions shall be subject to the review and recommendation of the Director of Engineering or his designee, and approval of the Planning Commission.
- (9) **Acceptable Surfaces** Sidewalks shall be constructed of white limestone concrete, four inches thick with a broom brush finish, using six foot by six foot squares or five foot by five foot squares (for narrower width requirement) with grooved expansion joints.

6.8 Street Extensions to/into Adjoining Properties.

Where future street access to an adjoining property is required, the following standards shall apply.

- (1) **Specifications** If the terminus of the dead-end street is less than 250 feet in length, the pavement section shall match the typical width of the street and will not require a temporary turnaround. If the terminus of the dead-end street exceeds 250 feet, a temporary turnaround will be required to facilitate the turning movement of larger vehicles. The radius of the pavement section shall be 35 feet. A temporary public easement shall be identified on the adjoining lot for any portion of the turnaround that extends past the normal right-of-way. The final plat shall state that all such easements will be automatically terminated when the street is extended to the adjacent tract. The bulb of the turnaround shall include the standard depth of stone and binder course. The curbing section for the temporary portion shall be extruded concrete curb. No driveway connections to the temporary cul-de-sac shall be permitted without approval by the Planning Commission. When no driveway to the temporary cul-de-sac connection exists, no final topping shall be installed on the bulb of the cul-de-sac.
- (2) **Notice Signage** When a street is approved by the Planning Commission as a temporary dead-end for future extension into an adjoining tract of land, a sign shall be erected by the developer upon the construction of the temporary dead-end street. The sign shall be of high-intensity reflectivity, measuring 12-inch by 30-inch (12" x 30") with the following text, "Temporary Dead-End Street, to be Extended with Future Development of the Adjoining Tract."

- (3) **Future Completion of Connections** At such time as the permanent street is extended into the adjoining property and the temporary cul-de-sac is to be abandoned, the developer of the adjacent tract shall be required to properly connect this section of the existing street with the new street. This shall include, but is not limited to, removal of excess asphalt in the turning radius, installation of curb and gutter, drainage improvements, driveway connections, final application of the asphaltic concrete wearing surface, and restoration of the adjoining area with topsoil and seed.
- (4) **Security** Refer to Article Eight of these Regulations for detailed information regarding securities.

6.9 Private Streets and Gated Subdivisions.

The design, construction, and inspection of all streets, curbing, drainage, street lighting, utilities, and traffic control devices in a private street subdivision shall conform to the same design and engineering standards as applied to typical development under these Regulations. In addition, the Planning Commission may impose additional requirements for private streets and gated subdivisions as may be necessary to carry out the intent of these Regulations contained herein and within the Brentwood Municipal Code. The following provisions shall apply to private street subdivisions.

- (1) **Subdivision of Land.** Each concept plan, preliminary plan, final plat, or revised final plat for a private street subdivision as provided for in this article shall require the approval of the Planning Commission. All private streets within a subdivision shall be identified on the final plat as access easements for the benefit of all lots in the subdivisions. All property within the access easements shall be owned and maintained by the property owners association. All public utility and drainage easements within a private street subdivision shall be formally dedicated on the final plat at locations and widths acceptable to the Public Works, Engineering, and Water and Sewer Departments, as well as other affected utilities. The plat shall further provide that employees of the City and all utilities providing service to the subdivision, when acting in the course of their employment, shall have the right to enter such easements and all vehicle access easements, and to maintain all public utilities and facilities lying therein.
- (2) Conflicts with the Existing Transportation Network. A private street subdivision shall not cross any existing collector or arterial street as designated on the City's current Major Thoroughfare Plan, nor prevent the construction of such future streets as identified on the plan. No private street or gated subdivision shall be permitted in a location that would prevent vehicular access to future subdivisions on tracts adjacent to the site if such tracts, in the determination of the Planning Commission, lack sufficient alternative access. In addition, a private street or gated subdivision shall not disrupt nor prevent the reasonable establishment of public pedestrian and bikeway connections between adjacent subdivisions, public streets, parks and other facilities used by the public.
- (3) **Minimum Access Provisions.** A private street subdivision having more than 150 dwelling units but less than 300 dwelling units shall provide at least two vehicle access points. If the subdivision includes 300 or more dwelling units a minimum of three vehicle access points are required.
- (4) **Public Facilities.** No school, park, or other public facility shall be located within a gated subdivision unless it is fully accessible to the general public from a public right-of-way.

- (5) **Design of Access Gates.** No gates, structures, or guardhouses for a private street subdivision shall be placed on public right-of-way. All gates and guardhouses shall be located at least 50 feet from the public right-of-way. Guardhouses and gate structures shall be approved by staff from the Engineering Department, the Police Chief, and the Fire Chief, and shall include a standard system, acceptable to the City, for gate operation access to the subdivision. At minimum, gates shall be constructed to permit opening in emergencies by bolt-cutters or breakaway panels. Under no circumstances shall the City or emergency services providers be responsible for the repair of damage to the gates or structures associated with an emergency response into the subdivision.
- (6) **Security for Completion of Improvements**. Upon approval of the final plat of a private street or gated subdivision by the Planning Commission, security in a form acceptable to the City shall be prepared and submitted to staff with the Planning and Codes Department with the recording of the final plat. The security shall be in an amount determined by City staff to assure completion of streets and infrastructure work as shown on the approved construction plans. (Refer to Article Eight of these Regulations for additional standards.)

6.10 Storm Drainage.

- (1) **Purpose.** The purpose of this section is to provide criteria for drainage system design that accomplishes the following:
 - a. Accounts for both off-site and on-site storm water flows
 - b. Protects downstream properties
 - c. Maintains natural topographic and watershed divides
 - d. Conveys storm water to a stream, natural channel, or other existing facility in a manner that does not cause flooding or erosion
 - e. Discharges storm water into the natural channel by connecting the channel at natural elevations, or by discharging the storm water into an existing facility of sufficient capacity to receive it, or by discharging into an approved drainage well
 - f. Treats storm water quality consistently on new development and significant redevelopment sites as stipulated in these Regulations.
 - g. Complies with the City of Brentwood and FEMA requirements whichever are more stringent. Refer to the Floodway ordinance regarding development of properties within the floodplain.

(2) **Method**.

- a. The Soil Conservation Service (SCS)-Technical Release Number 55 (TR-55) shall be used for calculating runoff unless another technically acceptable method is approved by staff from the Engineering Department.
- b. The developer or the developer's engineer, shall be prepared to substantiate the basis for any proposed alternative method.

(3) Technical guidelines.

- a. **Drainage system.** The overall drainage network is divided into two components, the minor system and the major system.
- b. **Minor system-description**. The minor system, which is sometimes termed the "initial system," consists of a wide variety of drainage appurtenances ranging from inlets, manholes, street gutters, streetside ditches, storm sewers less than 54-inch diameter or equivalent and swales to small channels or pipes. This system serves to collect the initial storm water runoff and convey it to a proper outfall within the major system.
- c. **Major system-description.** The major system primarily consists of natural waterways, large storm sewers (54-inch diameter or equivalent and greater), and large water impoundments. In addition, the major system includes some less obvious drainage ways such as overland relief swales and infrequent temporary ponding at storm sewer inlets. The major system includes not only the trunk line drain which receives the water from the minor system, but also the natural backup drain which functions in case of overflow from or failure of the minor system. Proper overland relief will not flood or damage homes, businesses, or other property. A major system will function as a drainage basin, whether or not it has been planned and designed, and whether or not development is situated wisely in respect to it.
- d. **Minor system design.** The design of the minor storm water drainage system shall be based on a storm frequency of 10 years. This criterion shall be applied to both closed conduit and open channel systems. However, if the 10-year design flow for an open channel system is greater than 100 cubic feet per second (cfs), then the open or closed system shall be capable of passing the 100-year design flow within the drainage easement. Systems relying on sinkholes or drainage wells for discharge shall be capable of passing the 100-year design flow within the drainage easement, assuming plugged conditions (0 cfs drawdown) for the sinkhole. In residential developments where the average lot size is less than 20,000 square feet, the following general guidelines shall be observed in the design of the minor system:
 - 1. Design surface runoff across lots shall not have erosive velocities.
 - 2. Quantities of surface runoff greater than 4 cfs that flow through lots shall be collected and conveyed in a system of open channels, closed conduits, or a combination of both and shown on the construction drawings.
- e. **Major System design.** Wherever possible, natural waterways serving the major system shall remain undisturbed. Detention may be required to avoid discharges that exceed the capacity of natural waterways. Modifications to natural waterways are discouraged and require the approval of TDEC. Improvements to natural open channels that are to function primarily as the major system shall be designed to pass the 100-year design flow without damage to the channel. Man-made channels designed to function as the major system shall be capable of carrying a 100-year design flow. Where man-made channels are necessary, the channels should be located as far away from buildings or structures as possible and preferably in established open space or other conservation corridors. This major system should provide relief such that no building will be flooded with a 100-year design flow,

even if the minor system capacity is exceeded. The following requirements pertain to design of the onsite major storm water management system:

- 1. Areas shall be graded in such a manner, or buildings located or constructed in such a manner that if the capacity of the minor system is exceeded, no building will be flooded by the design flow. Critical areas to consider are sumps, relatively flat areas, and areas where buildings are located below streets or parking lots.
- 2. The 100-year frequency storm for the duration equivalent to the time of concentration shall be used to compute runoff for the major storm water management system.
- 3. For the first trial, the same time of concentration values shall be used that were used in designing the minor storm water management system and the minor system should be assumed to be completely inoperable. If no building will be flooded based on these assumptions, then the analysis can be considered complete.
- 4. If buildings will be flooded based on the assumptions used in the preceding item, more precise hydrologic and hydraulic computations are required. The minor system, overland relief swales, or surface storage shall be designed so that no building will be damaged by flooding.
- 5. In general, the minor storm water management system should not be oversized as a basis for providing major system capacity. The major storm water management system should be in the form of area grading or the location and construction of buildings in such a manner that overland relief swales or surface storage will provide adequate flood protection. The major storm water management system shall be evident on the drainage plan, including overland relief swales and areas that may be affected by surface storage for a 100-year design storm. Calculations performed for major system design shall be submitted with the drainage plan.
- f. **Open channels.** Open channels shall be designed to prevent erosion. Erosion control measures shall be in accordance with the Best Management Practices Manual used by the City of Brentwood. Ditches with a velocity of greater than three ft./sec. shall be lined with "rip-rap", eight-inch to 12-inch stone minimum size, or be lined with a four-foot minimum concrete channel, or other equivalent materials approved by staff from the Engineering Department.
 - 1. **Channel Capacity.** Open channel capacity shall be determined by Manning's equation. Appropriate Manning's n values shall be used for design and are subject to approval from City of Brentwood.
 - 2. **Lined Channels**. Open channels may be designed as hard-armored, geosynthetic or soil bioengineering lined channels. Geo-synthetic and soil bioengineering techniques are described in the City's Best Management Practices Manual. Channel lining shall be required when the design velocity exceeds the allowable, non-erosive velocity for a given channel reach and no other erosion control measures provide adequate protection.

- 3. **Grassed Channels**. The design of grassed channels shall consider the variable degree of flow resistance generated by different types of ground covers. Temporary erosion control shall be utilized during non-growing seasons and during grass cover establishment. The engineer shall note on the drawings or in the specifications that "All grassed channels must be in a well-stabilized condition and show no sign of erosion at the time of final acceptance by the City of Brentwood".
- 4. **Easement Width.** All open channels shall be located within a public utility and drainage easement. Minimum easement width shall be determined from Table Four.

TABLE FOUR
MINIMUM EASEMENT WIDTHS FOR OPEN CHANNELS

CHANNEL WIDTH	REQUIRED EASEMENT WIDTH
Less than 5 feet	10 feet
5 – 20 feet	10 feet greater than width at top of bank
Greater than 20 feet	15 feet greater than width at top of bank

g. Storm Pipes and Culverts.

- 1. **Pipe Capacity.** Closed pipe shall be designed for the total flow intercepted by the inlets during the design storm event. The minimum diameter for all storm drains shall be 18 inches.
- 2. **Easement Width.** Minimum allowable easement width for storm water pipes and culverts shall be determined from Table Six. In the event that easement width requirements change after plans have been approved, plans showing the corrected easement width must be submitted to the City of Brentwood for review and approval.
- 3. **Drainage structures under public streets.** Drainage structures under streets which are to be dedicated to the City of Brentwood shall safely pass the calculated flows of the post-development storm based on the design year, as shown in Table Five.

TABLE FIVE DRAINAGE STRUCTURE DESIGN FOR STREETS

Street Classification	Design Year
Local Residential	10 Year
Collector-Commercial/Service Institution	25 Year
Arterial Streets and Highways	50 Year

4. **Culverts.** Culverts shall be sized based on inlet and outlet control conditions. Headwater (HW) created by the worst condition shall neither overtop the proposed street nor cause unduly large impoundment of water behind the culvert. All culverts shall be checked for the effects of the 100-year storm. No flooding of buildings should result from the 100-year design flow. All piping underneath public streets shall be reinforced concrete pipe,

ASTM C-76-60, standard strength. The minimum pipe diameter shall be 18 inches. A Manning's "n" value of 0.012 shall be used for the design value of the concrete pipe. Refer to Table Six. Drainage pipes that are routed along property lines shall be extended to the rear property line at a minimum.

TABLE SIX
MINIMUM EASEMENT WIDTHS FOR STORM DRAIN CONDUITS

Equivalent pipe Diameter	Invert Depth (Feet)	Minimum Easement Width (Feet)
18 inches	0 to 5	15
	6 to 10	20
	11 to 15	35
	16 to 20	45
24 to 30 inches	0 to 5	15
	6 to 10	20
	11 to 15	35
	16 to 20	45
	0 to 5	20
36 to 48 inches	6 to 10	25
	11 to 15	40
	16 to 20	50
	0 to 5	N/A
54 to 72 inches	6 to 10	30
	11 to 15	40
	16 to 20	50

- 5. **Inlets.** Inlets shall be designed to receive the 10-year storm event.
- 6. **Outlet Protection.** The outlet ends of discharging pipes shall not result in velocities that equal or exceed the erosive velocity of the receiving channel, unless energy dissipation and permanent erosion protection measures are placed at the outlet. Energy dissipation and erosion control devices shall have no overfall at the terminal end and shall discharge onto a stable section. The terminal section shall be considered stable if the terminal section design velocity is less than the erosive velocity.
- 7. **Bridges.** All bridges shall be designed for the 100-year, 24-hour storm event. The design flow shall consider runoff from the total tributary area and will require stream channel routing, as appropriate.
- 8. **Retention/detention ponds-general.** Retention and detention ponds shall be designed to limit the rate of runoff from the site and temporarily store the excess volume. The maximum allowable rate of discharge from the developed site shall be no more than would have occurred from a storm of specified frequency prior to site development. This allowable design storm frequency varies in accordance with the drainage area above the point of discharge as tabulated in Table Seven.
 - a. **Retention/detention facilities** -- location. Retention and detention facilities shall not be located on any residential lot, and shall only be

located within designated open space areas, maintained by a homeowners association. Detention/Retention facilities shall also not be located within any required arterial street buffer, as defined within Section 78-184 of the Brentwood Municipal Code.

Exceptions to the pond locations may be considered when the topography dictates drainage patterns. The pond elevation in relation to adjacent streets and properties will be a factor in the consideration of exceptions.

b. **Design specifications.** Runoff from the discharge design storm shall be computed for pre-development conditions at the site. The volume of any required or necessary stormwater detention facility shall be sufficient to safely store the difference between the allowable discharge rate produced by the "discharge design storm" and the actual runoff from the developed site. The actual runoff under post-development conditions shall be computed based on a design frequency for a 24-hour duration storm, which varies in accordance with the drainage area above the point of discharge as tabulated below under "storage design storm". Detention facilities must be designed to safely pass the runoff produced by the 100-year, 24-hour storm under post-development conditions.

TABLE SEVEN
MINIMUM DESIGN STORM FREQUENCIES

Drainage Area (Acres)	Discharge Design Storm Frequency (Years)	Storage Design Storm Frequency (Years)
50 or Less	2	25
Over 50	5	50

- 9. **Stormwater quality.** The design of stormwater quality control practices shall include structural and non-structural devices and shall be designed in accordance with the following criteria and in accordance with the City's Best Management Practices Manual.
 - a. There shall be no distinctly visible floating scum, oil or other matter contained in the stormwater discharge.
 - b. The stormwater discharge must not cause an objectionable odor in the receiving stream.
 - c. Development will be required to minimize the impact to stormwater quality by applying structural and/or nonstructural management practices selected to address site-specific conditions. The goal for water quality treatment shall be 80 percent removal of the average annual total suspended solids (TSS) load. The water quality volume is that volume of stormwater runoff resulting from the first 1.0 inch of rainfall from a site per storm event.

- d. No land disturbance activities, whether by private or public action, shall be performed in a manner that will negatively impact stormwater quality whether by flow restrictions, increased runoff, or by diminishing channel or floodplain storage capacity. Acceleration of erosion or sedimentation, or transport of other pollutants or forms of pollution, due to various land development activities must be controlled.
- e. The treatment standards for stormwater quality are the same for all sites within the City of Brentwood unless other secondary pollution reduction goals are established through the establishment of Total Maximum Daily Loads (TMDLs).
- 10. **Offsite improvements.** Certain areas may provide opportunities to construct downstream improvements in lieu of on-site storage facilities. Downstream improvements will require written permission of all affected property owners, including both property owners who are affected by physical improvements and those affected by increased run-offs.
- 11. **Minor developments.** Development of small commercial and residential sites may be exempted from providing for increased runoffs. Exemptions will be considered on a case-by-case basis. Before consideration the design engineer shall furnish drainage calculations as requested by staff from the Engineering Department. Consideration shall be based on total runoff increases, historical instances of downstream flooding, adaptability of site to retention/detention facilities, etc.
- 12. **Previously developed sites.** The City of Brentwood reserves the right to require drainage calculations to be based on pre-existing conditions of developed sites where new development is proposed. Historical instances of downstream flooding will be the basis for requiring these calculations.
- 13. **Drainage calculations.** All submittals shall include drainage calculations and detailed hydraulic analysis of detention ponds. All detention facilities must be designed in accordance with the Best Management Practices Manual utilized by the City of Brentwood, available from Engineering Department staff. Submittals must clearly show how all values were derived.
- 14. **Headwalls.** All headwalls shall be constructed of reinforced concrete and include wing walls, unless otherwise approved by the staff from the Engineering Department. A toe shall be added to the headwall if the flow is in excess of ten cfs. Energy dissipaters shall be added to the outlet headwall if the velocity exceeds five ft./sec., if no other form of erosion control is provided.
- 15. **Drainage pipe outside street.** The City will allow corrugated metal pipe, AASHTO-M-36 (n=0.024), 16 gauge minimum thickness, or High-Density Polyethylene (HDPE) Manning's "n" = 0.013, when placed outside a paved surface. The minimum pipe diameter shall be 18 inches. The pipe shall meet one of the following standards:

- a. Galvanized per AASHTO, M-218;
- b. Bituminous coated per AASHTO, M-190;
- c. Aluminized per AASHTO, M-274; or
- d. Polymeric coded per AASHTO, M-245.
- e. Corrugated polyethylene tubing with a smooth interior, meeting ASTM, F-667 and AASHTO, M-294, Type.
- h. **Sinkholes.** Special precautions must be taken when the natural drainage of an area within a proposed development is found to be served by a sinkhole. The sinkhole cannot be located within a lot or area proposed for any amenity and must be noted on the final plat. If any portion of the drainage basin served by the sinkhole is planned to be developed a special study must be conducted to ensure the preservation of the sinkhole and/or the methods for managing storm water from this area. The study must be conducted by a civil or geotechnical engineer licensed to practice in the State of Tennessee.

6.11 Community Assets and Public Use/Service Areas.

Due consideration shall be given to the allocation of areas suitably located and of adequate size for playgrounds, parks, and open space for public use and services. In all subdivisions, due regard shall be shown for all natural features such as large trees and water courses, and for historically significant sites and similar community assets which, if preserved, will add attractiveness and value to the property and the community. Any property preserved as directed by the Planning Commission for community benefit must be identified on the final plat. The execution of deeds or easements to facilitate or monitor a community asset may be required as a condition of approval of the final plat.

6.12 OSRD-IP Open Space Residential Development -- Innovative Project Design Standards - Zoning District.

Special land use regulations have been enacted to guide innovative projects within the OSRD zoning district to encourage a wider range of housing options for the community and greater preservation of open space, while at the same time maintaining the fundamental density standard of one dwelling unit per acre. This section provides special standards for OSRD-IP developments which shall supersede the general design standards outlined in these Regulations.

- (1) **Street and Circulation Standards.** The circulation system shall include an interconnected network of streets designed to provide adequate traffic capacity, provide connected pedestrian and bicycle routes, minimize through-traffic volumes, minimize vehicular speeds, provide access to emergency vehicles, and provide for safe mobility. In addition:
 - a. The vehicular circulation system shall be designed to minimize conflicts between pedestrians and bicyclists.
 - b. In order to reduce traffic speeds, traffic calming features such as narrow lanes, medians, curb extensions, roundabouts, traffic circles, and textured pavement crosswalks shall be integrated into the design of the subdivision.
 - c. Curvilinear street alignment shall also be used where possible to reduce traffic speeds.

- d. Sidewalks, bikeways, and multi-use paths are an integral part of the OSRD-IP design. To the greatest extent possible, sidewalks and multi-use paths should connect to adjacent neighborhoods, schools, civic uses, and commercial areas.
- (2) **Street Hierarchy.** Streets within an OSRD-IP zoning district shall be classified according to the following standards. (Refer to the standard drawings contained within Appendix Two of these Regulations.)
 - a. IP collector streets shall meet the following standards:
 - 1. The minimum right-of-way width shall be 98 feet with median or 62 feet without median.
 - 2. The IP collector street is a low speed public street intended to provide the primary access between streets within an OSRD-IP development, and the City's arterial and collector street system. Frontage for lots may be provided by an IP collector.
 - 3. No direct driveway access shall be provided to the IP collector. Lot driveway access shall be provided through a rear service lane.
 - 4. The IP collector may be constructed without lot frontage. Where lot frontage is not provided, the Planning Commission may allow an alternate cross-section for the IP collector which consists of a two-lane street with bike lanes on each side, and ADA compliant sidewalks on both sides of the street. The sidewalks shall be separated from the street by an 8-foot planting strip. When lot frontage is absent, the Planning Commission may allow a multi-use path to provide pedestrian and bicycle access in lieu of sidewalks required for the IP collector.
 - 5. Where lot frontage is provided, the IP collector shall be a median divided street, with one travel lane in each direction. In addition, bike lanes and onstreet parking shall be provided on both sides of the street. ADA compliant sidewalks are to be provided on both sides of the street. The sidewalks shall be separated from the street by an 8-foot planting strip.
 - b. IP local streets shall meet the following standards:
 - 1. The minimum right-of-way width shall be 55 feet.
 - 2. The IP local street is a low-speed public street intended to provide access between the residences and the IP collector streets, and other IP local streets and IP cul-de-sacs. The IP local street provides frontage for the lots in the subdivision.
 - 3. The IP local street shall have one travel lane in each direction with on-street parking on one side of the street. ADA compliant sidewalks shall be provided on both sides of the street, and the sidewalks shall be separated from the street by an 8-foot planting strip.

- c. IP cul-de-sacs shall meet the following standards:
 - 1. The minimum right-of-way width shall be 92 feet.
 - 2. The IP cul-de-sac is a low speed public street terminus intended to provide access between residences and IP local streets. The IP cul-de-sac provides frontage for lots.
 - 3. The IP cul-de-sac shall be a median divided street with one-way counterclockwise travel flow on either side of the median. ADA compliant sidewalks are to be provided on both sides of the street and the sidewalks shall be separated from the street by an 8-foot planting strip.
 - 4. The maximum length of an IP cul-de-sac shall be 300 feet, as measured from the end of the radius return to the end of the pavement of the cul-de-sac.

d. IP rear service lane.

- 1. The minimum right-of-way width shall be 27 feet.
- 2. The IP rear service lane is a low speed public street intended to provide access to the rear of the property. Refer to Section 78-198 of the Brentwood Zoning Ordinance regarding access to lots zoned OSRD-IP.

(3) Additional IP Design Criteria.

a. **Sidewalks.**

- 1. Sidewalks shall be provided on both sides of all IP collector, local, and culde-sac streets that have lot frontage. Sidewalks shall be at least five feet wide. All sidewalks and street ramps shall be ADA compliant.
- 2. In lieu of sidewalks, the Planning Commission may approve a multi-use path to provide pedestrian connectivity.

b. **Bicycle Use Accommodation.**

- 1. On IP local and cul-de-sac streets, bicyclists shall be considered a normal part of the mix of vehicles on the street.
- 2. On IP collector streets, bicycle lanes shall be provided.
- 3. Off-street multi-use paths are encouraged to provide connectivity within the development and to the City's bikeway and pedestrian trail system. Multi-use paths shall be designed to AASHTO standards and shall be at least five feet from the edge of the travelway.

c. **On-Street Parking.**

1. Informal parking, which is parking that is allowed along streets, but is not specifically signed or marked, shall be provided on IP collector, local, and cul-de-sac streets.

- 2. On-street parallel parking shall be provided along both sides of IP collector streets that have lot frontage.
- 3. On-street parallel parking shall be provided along one side of IP local streets.
- 4. For IP cul-de-sacs, on-street parking shall be provided within the median.

d. **Planting Strips.**

- 1. Planting strips which include street trees shall be provided between the curb and the sidewalk along all IP collector, local, and cul-de-sac streets.
- 2. Planting strips shall be eight feet wide, unless the width is reduced by the Planning Commission.
- (4) **Curb Radii.** The curb radii at intersections shall be as follows:

TABLE EIGHT CURB RADII

Intersection Type	Curb Radius
IP Collector to Arterial or Collector	25 feet
IP Collector to IP Collector	15 feet
IP Collector to IP Local	10 feet
IP Collector to Rear Service Lane	10 feet
IP Local to IP Local	10 feet
IP Local to Rear Service Lane	10 feet

- (5) **Design Speed.** Design speed shall closely match the street type, vehicle use, and the proposed speed limit. The desired upper limit of design speeds for IP collector and IP local streets is 20 mph. The desired upper limit of design speeds for IP cul-de-sacs streets and rear service lanes is 10 mph.
- (6) **Minimum Centerline Radii.** Minimum centerline radii shall conform to the design speed for the particular street. Minimum centerline radii for specific design speeds are as follows:

TABLE NINE
MINIMUM CENTER RADII

Design Speed (MPH)	Minimum Centerline Radius
10 mph	25 feet
15 mph	50 feet
20 mph	90 feet

(7) **Stopping Sight Distances.** Minimum stopping sight distances shall conform to the design speed for the particular street and shall account for wet pavement conditions. A sufficient area at each intersection shall be kept clear of vegetation and other obstructions to ensure adequate vehicle sight distance. Stopping distances for specific design speeds are as follows:

TABLE TEN STOPPING SIGHT DISTANCES

Design Speed (MPH)	Stopping Sight Distance
10 mph	45 feet
15 mph	75 feet
20 mph	110 feet

(8) **Utility Plan.** The layout of all utilities shall be determined in advance of construction. All providers shall be involved in the initial design. Utility easements shall be established according to standards depicted by standard drawings contained within Appendix Two of these Regulations.

6.13 Historic Rural Development Standards

Special rural street construction standards may be approved by the Planning Commission for limited subdivision developments that include structures officially designated as historic sites by the Board of Commissioners. Eligible developments containing the special rural street construction design are limited to a minimum of 50 acres in size. Lots created within such developments must possess an average size of three acres, but in no case shall lots be less than one acre in size.

(1) **Deed Restrictions.**

- a. Developments implementing the special rural street construction design shall provide detailed deed restrictions for all affected lots, guaranteeing the lot size and residential density of the subject property in perpetuity.
- b. Deed restrictions shall be enforceable by each owner of the affected lots and by the City, and shall be subject to review and approval by the City Attorney, or his designee, in advance of formal subdivision approval.
- (2) **Street Standards.** The special rural street construction standard is limited in application to local streets only. This street type shall not be applied to collector or arterial streets, or to streets affording connectivity between adjoining subdivisions or developments. Local streets constructed under this standards shall meet the following technical standards:
 - a. **Right-of-Way Widths.** The standard right-of-way width shall be 40 feet. Outside the limits of the right-of-way on either side, a minimum width of 15 feet shall be dedicated for public utilities and drainage easements.
 - b. Pavement Width and Compacted Stabilized Shoulders. The minimum pavement widths shall be 22 feet with improved shoulders along each side. The shoulder width shall be a minimum of three feet. This pavement section will not require a curb and gutter section for surface drainage purposes. The drainage design will require streetside ditches to handle the stormwater flows from the street and lots. All driveway culverts shall be designed during the preparation of the subdivision construction plans for future installation by the property owner or builder.
 - c. **Pavement Section Design.** The pavement design is specified in Section 7.4 of these Regulations for local residential streets. The minimum depth of stone for the shoulders shall be six inches.

d. **Sidewalks.** No sidewalks are required within subdivisions using the Historic Rural Development standards.

6.14 Lots

Every platted lot shall contain sufficient area as defined by the City Zoning Ordinance for the applicable zoning district. Whenever there is a discrepancy between the minimum requirements noted within these Regulations, and those contained in other official regulations, the highest standard shall apply. The size, shape, and orientation of lots shall be such as the Planning Commission deems appropriate for the type of development and use contemplated. The Planning Commission shall ensure that the following provisions are met for new lots created under this authority:

- (1) **Arrangement.** Insofar as practical, side lot lines shall be at right angles to straight street lines or radial to curved street lines.
 - a. **Frontage.** Except as provided for in this section, all lots shall have at least 50 feet of frontage on an arterial street, collector street, local street, as designated in the Zoning Ordinance, or on a private street as permitted under Chapter 58, Article IV of the Brentwood Municipal Code. Lots fronting on a permanent cul-de-sac and located within an Open Space Residential Development (OSRD) zoning district may have frontage of not less than 35 feet, if approved by the Planning Commission upon the preliminary plan or final plat.
 - b. **Waiver of Frontage Requirement.** The Planning Commission may waive the lot frontage requirement for lots within a planned commercial development that do not front on an arterial street, collector street, or local street, if a permanent private access easement is established to serve such lots. The location of any such easement must be approved by the Planning Commission and identified on the master plan for the development, and the final plat for the lot(s). The minimum width for any such easement shall be 30 feet, provided that the Planning Commission may, in its discretion, require a wider easement in order to prevent traffic congestion and safety hazards. Provisions for repairs and maintenance of the easement shall be clearly established to the satisfaction of the Planning Commission. The Planning Commission may withhold its approval of any lots not fronting a public street if such satisfactory provisions have not been established, or if the Planning Commission determines that the creation of such lots is not in the public interest.
- (2) **Building Envelope.** Every platted lot shall contain sufficient building area (building envelope) as defined by building setback lines established by the City's Zoning Ordinance for the applicable zoning district. No portion of the building envelope shall be encumbered by the FEMA 100 year floodplain area.
- (3) **Lots with Steep Topography.** Lots containing existing ground slopes of fifteen percent (15%) or greater, anywhere on the lot shall be designated as a "transitional lot." No residence shall be built on a transitional lot without a detailed site plan prepared by a professional engineer or landscape architect licensed by the State of Tennessee. (Also refer to the Brentwood Zoning Ordinance for additional site plan requirements for transitional lots.)
- (4) **Water and Sewer Service.** Where public water and sanitary sewer systems are reasonably accessible, the developer shall connect with such systems and provide a service connection or connections to each lot, in accordance with Water and Sewer Department Construction Standards. Where public sewer is not accessible, an alternate method of sewage disposal may be used if it is authorized by the Williamson County Health Department, and is also

- approved by the Board of Commissioners. Where a public water supply is not accessible, a water well or other source may be used upon approval of the Board of Commissioners.
- (5) **Vehicle Access.** The Planning Commission may impose conditions or limitations pertaining to access to any lots created within a subdivision, including but not limited to private frontage streets, rear access streets, or other shared easements, where based upon commonly accepted and applicable traffic engineering principles, such conditions are necessary to ensure the safe and efficient flow of traffic upon public streets. Where such conditions or limitations are warranted, but not acceptable or feasible, the Planning Commission may disapprove the proposed subdivision or resubdivision.

6.15 Easements.

Easements for stormwater drainage, poles, wires, conduits, sanitary sewer, gas, and water mains or other utility lines along the front, rear, and side lot lines, as necessary or advisable to properly serve the subdivision or provide access through a subdivision shall be required.

- a. **Special Utility Easements.** Easements of the same or greater width may be required along the boundary lines of or across lots, where necessary for the extension of existing or planned utilities.
- b. **Stream Protection.** Whenever any stream is located in an area that is being subdivided, the developer shall provide a Waterway Natural Area along each side of the stream for the purpose of protecting the stream. (Refer to Chapter 56 of the Brentwood Municipal Code -- Stormwater Management and Erosion Control, of the Brentwood Municipal Code.)

6.16 Large Tracts or Parcels.

When land is subdivided into parcels in excess of one acre, such parcels shall be arranged to allow for the opening of streets in the future at the locations where topographic conditions permit safe and efficient connection of future streets, and for logical further resubdivision.

6.17 Suitability of 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 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 for development shall not be platted for residential, commercial, and/or service institution uses, or for any other uses that may increase flood hazard, endanger life, health, or property.

6.18 Dedications.

Land determined unsuitable for development per the preceding subsection, or which in the judgment of the Planning Commission should be maintained as public use areas for greenways, recreation, or access corridors, may be dedicated for public use, provided that acceptance of such land dedication by the City of Brentwood is subject to the approval of the Board of Commissioners.

6.19 Street Lights, Signage and Sign Posts.

The construction design package shall include a street lighting and signage plan per Article Seven. The street lighting and signage plans shall be consistent throughout all sections of a subdivision when the same materials are available unless otherwise approved in writing by the City of Brentwood.

51

ARTICLE SEVEN. CONSTRUCTION STANDARDS

7.1 Purpose.

The following standards provide information for the installation and construction of public improvements within a proposed development. (Refer to Appendix Two for Construction drawings and field practices.)

7.2 Required Improvements.

- (1) Every developer of a major subdivision shall be required to construct streets, lighting, signage and pavement markings, public sanitary sewer lines and services, stormwater systems, public water mains and service lines, fire hydrants, sidewalks, and bikeways, and to establish monumentation for right-of-way points and lot property corners, all in accordance with the approved plan, the conditions of approval and these Regulations.
- (2) As each section or subdivision is platted, all public improvements, including, but not limited to streets, bikeways or pedestrian accessways, utilities, and drainage, shall be installed by the subdivision developer to the property line of the next phase of development and/or to any other property abutting the subdivision. (Refer to Article 5.5 of these Regulations regarding improvements that must be completed before recordation of the final plat.)
- (3) The Planning Commission may require the upgrade or extension of off-site public utilities to provide service to the development.
- (4) The Planning Commission may waive the extension of certain public improvements when deemed in the public interest to do so and an alternative method for future completion of such improvements is determined and documented.

7.3 Grading.

(1) Clearing and grubbing.

- a. Clearing and grubbing includes the removal and disposal of all vegetation, topsoil and deleterious or unstable materials within the proposed areas of the rights-of-way, slopes and easements and other areas as shown on the site grading plans unless certain areas or objects are noted to remain undisturbed.
- b. Erosion-siltation controls and tree protection shall be installed prior to the clearing and grubbing operation.
- c. The methods of disposal available to the contractor may include burning, clipping or haul-off. A burn permit, issued by staff from the Brentwood Fire Marshal's office may be required.
- d. Roots larger than one inch in diameter must be grubbed out and removed.
- e. Land disturbance shall only occur in areas as shown on the site grading plans.

(2) Topsoil Stripping and Stockpiling.

- a. Topsoil stripping includes the removal of topsoil material from the limits of the right-of-way areas or other areas designated on the site grading plans.
- b. Topsoil removal is dependent upon the depth and types of soil and elevations of rock outcropping.
- c. The areas for stockpiling shall be designated on the construction plans and shall be in areas that do not conflict with other construction activities, outside of flood plain areas, Waterway Natural Areas (WNA), or areas designated as tree protection areas or required buffers. If a stockpile areas remains more than 14 days then the contractor must provide erosion measures such as seeding, mulching and silt fencing around the perimeter of the stockpile area.

(3) Street Fill Material.

- a. Fill material must consist of soil, rock, or an approved soil/rock mixture free from roots, wood, organic matter, rubble and any other deleterious material.
- b. Soil fills must be free of rock fragments over six inches in maximum dimension and must have a minimum dry density, when compacted of 95 pounds per cubic foot. Soil fill must be placed in maximum lifts of 8 inches and compacted to at least 95 percent of its maximum dry density as determined by ASTM D-698 (Standard Proctor). Soil fill must be stable after compaction, regardless of compaction percentage. Adequate compaction will be verified by in-place density tests performed by staff from the Engineering Department.
- c. Rock fill shall consist of durable, clean, well-graded "shot rock" or crushed stone. The maximum dimension of rock fragments used in the rock fill shall be 12 inches and there shall be less than 15 percent fines (soil and rock fragments passing a U.S. No. 200 sieve) in the mass. Rock fill shall be placed in lifts not to exceed 30 inches and shall be compacted with heavy steel-wheeled or tracked vehicles. Adequate compaction will be judged in the field by staff from the Engineering Department, based on stability of the fill in place.
- d. An approved soil-rock mixture shall consist of soil interspersed in a well-graded mixture of rock fragments no larger than 12 inches in maximum dimension. The soil-rock mixture shall be placed in lifts not exceeding 12 inches in maximum thickness and compacted with tamping rollers until the soil portion of the mass is compacted to at least 95 percent of its maximum dry density as determined by ASTM D-698. The soil portion of the mass shall be within +/- two percent of its optimum moisture content during placement. Compaction will be verified by inplace density tests where possible, but if excessive rock fragments prevent density tests, adequate compaction will be judged by staff from the Engineering Department based on the stability of the mass under the weight of heavy construction equipment.
- e. If fill material is to be transported from an off-site source the contractor shall furnish samples suitable for determining moisture-density relationship of all soil types to be used in fills. These samples shall be furnished at least one week in advance of their use on the project. The contractor shall contact staff from the Engineering Department to allow inspection of the sampling procedures.

f. Immediately before beginning fill placement, and before applying the aggregate base in cut areas, the subgrade must be proof-rolled using a heavily loaded pneumatic-tired vehicle such as a loaded dump truck. This proof rolling must be observed by staff from the Engineering Department. Any soft or unstable areas delineated thereby must be undercut to stable ground and backfilled with approved fill material.

(4) Street Excavation.

- a. Excavation is the removal of earth from a street subgrade, trench or slope. The means of excavation can be blasting or mechanical means such as a scraper or hoeram. The type of materials removed from a mass area or trench is dependent upon the depths of cut and soil types.
- b. The materials recovered in an excavated area may be suitable for use in fill areas. The suitability of the material will be dependent upon testing and approval by a geotechnical engineer. The placement of the material shall meet the compacted requirements established in section 7.2 (3) of these Regulations.
- c. If excavations are left exposed to the weather for extended periods of time after they are brought to grade, and/or if deterioration of the sub-grade has occurred by either wetting or drying, appropriate corrective actions must be taken. Corrective actions shall consist of scarifying and re-compacting the subgrade or by use of other measures as deemed appropriate by staff from the Engineering Department.
- d. Materials that are classified as unsuitable shall be hauled off.
- e. Stockpile areas shall be designated areas shown on the construction plans or areas approved by the design engineer.
- f. Geologic hazards: Any areas which present geologic hazards must be investigated by a registered geotechnical engineer. If there is a potential for instability, design measures shall be included to minimize the risk.

(5) **Backfilling of Trenches.**

- a. The material used for backfilling in a utility trench must be suitable material as monitored and approved by staff from the Engineering Department.
- b. The depth of the bedding material in the trench shall be a minimum of 6 inches of #67 stone and brought to level of 12 inches over the top of the pipe.
- c. The width of the trench is determined by size of the pipe or culvert.
- d. Trenches located in streets shall be backfilled with #67 stone and compacted to a depth below the street subgrade elevation.
- e. Trenches located outside of a street can be backfilled with an approved suitable soil mixture and compacted in 8 inch depths as directed by staff from the Engineering Department.

f. Where an unusually wide trench is necessary, such as where blasting of the trench is required and/or multiple utilities must be accommodated in a single trench, staff from the Engineering Department may allow backfilling with soil to a specified depth, topped off with stone. Prior approval by staff from the Engineering Department is required and specific construction techniques and/or materials may be specified.

7.4 Street Construction.

(1) Mineral Aggregate Base Course.

- a. The subgrade must be approved by staff from the Engineering Department before placement of the base course.
- b. The mineral aggregate base shall consist of hard, durable crushed limestone. The gradation for mineral aggregate base shall be: Class A aggregate, Grading D, as specified by section 903.05 of the Tennessee Department of Transportation's "Standard Specifications for Street and Bridge Construction," latest edition or other approved material. In no case shall the weight of material passing the U.S. No. 200 sieve (wet method) exceed 15 percent of the mass by weight.
- c. The mineral aggregate base shall be spread by a mechanical spreader or other approved method which will prevent segregation. The mineral aggregate shall be spread in layers no greater than six inches in thickness and compacted by appropriate means to at least 95 percent of its maximum dry density as determined by ASTM D-1557.
- d. Any damage to the base course during construction, including raveling, contamination with silt, loss of density, or loss of material due to construction traffic, shall be repaired by replacing and re-compacting the base.

(2) Concrete Curb and Gutter.

- a. The curb and gutter section shall include a 6-inch tall post curb with a 24-inch gutter, per Appendix Two, Drawing 6. Concrete for the curb and gutter shall be Class "A" concrete, with a compressive strength of 4,000 p.s.i. Mountable curbs shall be constructed of Class "A" concrete with a compressive strength of 4,000 p.s.i. (refer to Appendix Two, Drawing 29).
- b. Expansion joints shall be placed at intervals no greater than 100 feet using preformed filler $\frac{1}{2}$ inch thick.
- c. Contraction joints shall be sawed every 10 feet at a minimum depth of 1/4 inch.
- d. Under-drains shall be required along the curb line when the final grade of the ground slopes toward the street, unless exempted in writing by staff from the Engineering Department. A four-inch perforated drainpipe shall be installed under the centerline of the curb and gutter in accordance with Appendix Two, Drawing 7, to ensure proper drainage. The drain shall be backfilled with stone and encased with geo-technical fiber cloth. The drainage pipe shall connect to the storm drain at each box/catch basin.

- e. The developer shall assume the responsibility for all curb and gutter damage. All identified damage shall be replaced before placement of the final asphaltic topping.
- f. It is recommended that the developer/contractor document any existing driveway or damage adjacent to work areas via photos or other means prior to beginning curb/gutter replacement. The developer/contractor is responsible for any damage attributed to curb/gutter replacement operations.

(3) **Prime Coat.**

- a. Prime coat shall be emulsified asphalt, Grade AE-P, or an approved equal.
- b. A bituminous prime coat shall be applied uniformly on the surface of the base at a minimum rate of 0.3 to 0.4 gallons per square yard.

(4) Asphaltic Binder Course.

- a. Asphaltic binder course shall comply with section 308 of the Tennessee Department of Transportation "Standard Specifications for Street and Bridge Construction".
- b. The binder course shall not be placed in compacted layers in excess of three inches.
- c. The contractor shall provide all necessary equipment for the proper installation of the asphalt surface treatments as outlined in the Tennessee Department of Transportation Standard Specifications Section 408.03, Equipment.

(5) Tack coat.

- a. The tack coat shall be cut-back asphalt, Grade RC-70 or emulsified asphalt, SS-1.
- b. The bituminous tack coat shall be applied uniformly on the power cleaned surface at a rate of 0.03 to 0.05 gallons per square yard.

(6) Asphaltic Concrete Wearing Surface.

- a. The asphalt wearing (surface) course shall not be placed for a minimum of one year or until 75 percent (75%) of the building construction has been completed or as determined by the Engineering Director.
- b. Bituminous plant mix base (hot mix): The bituminous plant mix base shall comply with section 903.08 of the Tennessee Department of Transportation "Standard Specifications for Street and Bridge Construction".
- c. The pavement surface course shall consist of asphaltic concrete surface (hot mix) Grading "411-E" in compliance with section 903.11 of Tennessee Department of Transportation Standard Specifications. Grading "D" may be used where the vertical grades exceed ten percent.
- d. Asphaltic concrete layers shall not be placed in excess of two inches per layer.
- e. The asphaltic surface course shall be placed with an electronic paving machine with a 40-foot ski, unless otherwise approved by staff from the Engineering Department.

- f. The contractor shall provide all necessary equipment for the proper installation of the asphalt surface treatments as outlined in the Tennessee Department of Transportation Standard Specifications Section 408.03, Equipment.
- g. The driving surface must be smooth and comply with the Tennessee Department of Transportation Ridability Special Provision.
- h. Alternative pavement sections must be approved by the Planning Commission.

(7) Sidewalks.

- a. The contractor shall provide for a compacted subgrade for the installation of sidewalks.
- b. The minimum depth of the stone base shall be 4 inches.
- c. Sidewalks shall be constructed of white limestone concrete, four inches thick with a broom brush finish, using six foot by six foot squares or five foot by five foot squares (for narrower width requirement) with grooved expansion joints. Refer to Section 6.6 regarding sidewalk width requirements based upon street designations.
- d. Concrete shall be Class A with a compressive strength of 4000 p.s.i..
- e. Cross slopes for the sidewalks should not exceed two percent (2%) grade. Longitudinal slopes shall not exceed eight percent (8%) grade.
- f. When installed adjacent to a curb and gutter section, a fiber expansion joint shall be installed between curb and sidewalk.
- g. All sidewalks shall be located within the non-vehicular portion of the right-of-way, or within a dedicated sidewalk easement on the abutting private property. The specific location for sidewalks shall be coordinated with utility and other public improvements.
- h. Sidewalks along lot frontages shall be installed concurrent with the construction of building improvements on the individual lot and prior to the issuance of the certificate of occupancy.
- i. At such time that 75 percent (75%) of the platted lots are developed and/or 75 percent (75%) of the sections of required sidewalks are installed within a subdivision or section thereof, staff from the Engineering Department may require the developer to complete the remaining sidewalk sections in advance of building improvements on the remaining vacant lots. It shall be the developer's responsibility for completing all required sidewalks within a subdivision or section thereof.
- j. All sidewalk sections shall be completed before staff from the Engineering Department will authorize the installation of the final asphaltic topping.
- k. Sidewalk ramps shall be designed in accordance with the guidelines of the Americans with Disabilities Act (ADA), Public Law 101-336 (refer to Appendix Two, Drawings 4 and 18).

(8) Bikeways/Bike Lanes/Bike Routes.

- a. Streets and highways designated as bike routes by the City, or constructed with bike lanes shall be appropriately marked and signed by the developer of the subdivision.
- b. Design and construction of off-street bikeways shall be in accordance with the alignment and classification denoted on the Bike Route Plan, or Long Range Plan and standards set forth in the AASHTO Guide for the Development of Bicycle Facilities, current edition. The minimum width of all bikeways shall be eight (8) feet. In some cases additional widths may be required.
- c. The minimum pavement design for a bikeway will be 6 inches of stone base and 2 inches asphaltic wearing surface.
- d. Bikeway ramps shall be designed in accordance with the guidelines of the ADA, Public Law 101-336.

7.5 Street Lighting.

- (1) A complete street lighting system shall be designed and approved with the appropriate electric utility. The style and type of the street lights shall be determined through consultation with the electric provider and the City of Brentwood. The same style poles and lighting fixtures shall be used in all phases of a subdivision when the same units are available, unless otherwise approved in writing by the City of Brentwood.
- (2) The illumination pattern must be sufficient to ensure safe and adequate pedestrian and vehicular lighting conditions. In general, light poles installed in residential areas should be no greater than 300 feet apart and located at street intersections and at the terminus of all permanent cul-de-sacs.
- (3) Light poles in commercial and service institution districts should be no greater than 250 feet apart and located at every street intersection.
- (4) Other design aspects, such as spacing of poles, height of poles, type of lighting fixture, distribution of the illumination pattern, intensity of illumination, etc., must be in accordance with the Illuminating Engineering Society (IES), and all applicable electrical codes. A copy of all design data shall be submitted for the review and approval by staff from the Engineering Department.
- (5) The complete lighting system shall be designed using underground conduit with metal light poles and installed in such a manner that the system will be accepted for perpetual maintenance by the electric utility. The lighting system must be installed and fully operable prior to 50 percent completion of the proposed structures within a platted section of the subdivision.
- (6) All material furnished and all work performed shall be in strict accordance with the latest revision of the National Electric Code, the National Electrical Safety Code, and the codes, regulations, and rules applicable in the area in which the work is being performed.

7.6 Traffic Control, Street Markers and Warning Signage.

- (1) All traffic regulatory signage shall conform to the requirements of the MUTCD, latest edition, and shall be installed within the limits of the public right-of-way or approved private access easement.
- (2) The edge of the sign shall be placed a minimum of 2 feet from the street, measured from the face of curb and 3 feet (edge of sign) if the street has no curb. The height of the sign shall be a minimum of 6 feet tall, measured from the top of the curb to the bottom of the sign. If the street has no curb, the height shall be measured from the edge of pavement to the bottom of the sign.
- (3) The designated speed limit for all streets shall be as provided in the Brentwood Municipal Code or as otherwise established by resolution and approved by the Board of Commissioners.
- (4) All street name signs and traffic regulatory signs shall be of high-intensity reflectivity.
- (5) Temporary signs may be installed and maintained in lieu of permanent signs until the final asphalt topping has been installed. Temporary signs must meet the same requirements for mounting height, size, and legibility as permanent signs but may be mounted on temporary structures.
- (6) The installation of temporary (or permanent) signs in accordance with these standards must be approved by staff from the Engineering Department before building permits can be issued.
- (7) The homeowners or property owners association within a subdivision shall retain maintenance responsibilities for any decorative street name signs or regulatory signs and decorative posts. The City of Brentwood shall not be responsible for maintenance of any decorative signs or posts. All decorative signs must comply with the requirements as detailed within the MUTCD. All decorative signage must be reviewed and approved by staff from the Engineering Department. The same style and type of signs and posts must be used in all phases of a subdivision if available unless otherwise approved in writing by the City of Brentwood.
- (8) Where arterials or collector streets intersect arterial streets, provide pavement markings and stripping per the requirements as detailed within the MUTCD.
- (9) During construction of the subdivision and until at least 75% of all of the building construction has been completed or as determined by the Engineering Director, the developer shall install "no parking" signs in the areas where construction is ongoing, on one side of all designated local streets. The required signage shall comply with the requirements as detailed within the MUTCD. The signs may be removed upon recommendation of the Engineering Director or his designee.

7.7 Driveways.

A driveway is a connection or an access point that connects a lot or tract of land to a public right-ofway (i.e. street or street). A driveway is typically constructed after the infrastructure is completed for a subdivision and therefore, will require modifications to an existing curb and gutter or curb to construct the improvement. Also, a portion of the work to construct a driveway occurs in the public right-of-way and may impact utilities and easements in the ground and/or a sidewalk.

(1) Residential driveways.

- a. A driveway shall be constructed to provide a connection to the curb line that does not obstruct or divert flow out of the gutter line. For a driveway that accesses downhill from the street the elevation of the driveway at the right-of-way must achieve a minimum elevation equal to that at the top of the curb. the connection point shall provide an elevated apron to keep surface runoff in the gutter and not allow overflow to discharge into the driveway onto private property.
- b. The maximum width of the curb cut at the driveway connection point, at the street or curb and gutter or edge of pavement, where applicable shall be 20 feet, unless otherwise approved by staff from the Engineering Department.
- c. If the driveway crosses a sidewalk, then the maximum cross slope allowed within the width of the sidewalk area is two percent (2%). Approval and design of driveway cuts into the curbs shall conform to the construction specifications in these Regulations and all applicable standards established in Chapter 78, Article VII of the Zoning Ordinance -- "Vehicle Access Control."
- d. The maximum slope of any residential driveway shall be twenty percent (20%). Refer to Section 78-486 of the Zoning Ordinance.

(2) Commercial/Service Institution driveways.

- a. Driveway connections for sites in commercial or service institution zoning districts may vary depending on location, number and use.
- b. The maximum grades on driveway accesses shall not exceed eight percent (8%). All curb cuts must have the prior approval of the Planning Commission, or as established by the Zoning Ordinance for individual districts.
- c. If the driveway crosses a sidewalk, then the maximum cross slope allowed within the width of the sidewalk area is two percent (2.0%).

7.8 Inspection/Testing of Streets and Infrastructure.

- (1) Staff from the Engineering and Public Works Departments shall periodically inspect the proposed improvements during construction to insure their satisfactory completion.
- (2) The applicant shall pay the city all inspection fees, which shall be based upon the hourly cost of field inspecting for qualified personnel, or as established in the City's annual budget.
- (3) If it is determined by inspection that any of the required improvements have not been constructed in accordance with the city's construction standards and specifications, the applicant shall be responsible for the correction of all deficiencies in workmanship or materials to complete the proposed improvements.

7.9 Utility Systems.

(1) **General.** There are several providers that furnish utility services to developments in Brentwood. The utility that will provide service to a particular development is determined by the "service area" of the provider. When it is not clear who the provider will be, it is recommended that staff from the City of Brentwood Water and Sewer Department be contacted for direction. A map of the service areas for water and sewer providers is available on the City's website. In some cases there may be several providers for a given tract. For example, it is not unusual for a development to have different utility providers for each type of utility such as water, sewer, electrical, gas, phone and cable. Therefore, coordination of utilities is a critical part of the subdivision process.

Each utility has different requirements for design, construction, approval, fees, security deposits and inspections. It is the developer's responsibility to coordinate with the appropriate utility providers including the City Water and Sewer Department. It is important to be aware that approval by the City of Brentwood's Planning Commission does not constitute approval of the utility services or the availability of utilities.

(2) Water System.

- a. Distribution lines properly connected with the public water supply system or with an alternate supply approved by the Board of Commissioners and the Tennessee Department of Environment and Conservation shall be constructed in such a manner as to adequately serve both domestic use and fire flow requirements, all lots as shown on the subdivision plat.
- b. The applicant shall submit a water availability request to staff from the Water and Sewer Department prior to the start of the project, and receive confirmation of availability before the approval of the preliminary plan.
- c. All distribution lines shall be constructed of Ductile Iron Pipe (DIP).
- d. Distribution lines of less than six inches in diameter shall not be installed, unless dual supply water lines are installed to serve the development.
- e. The distribution system shall be designed as a "loop" system that provides two directions of supply with a minimum of dead ends.
- f. Fire hydrants shall be placed in locations acceptable to the Fire Chief, or his designee, to ensure that adequate fire protection to all structures can be provided and that the hydrants will be accessible, will be protected from traffic hazards, and will not obstruct walkways, streets, or parking facilities. Fire hydrants shall be placed no greater than 500 feet apart. Reflective blue pavement markers (Stimsonite 88, or approved equal) indicating the location of the fire hydrants shall be cemented to the street approximately one foot off of the centerline, at right angles, in the lane adjacent to the hydrant prior to the acceptance of the street by the City.
- g. For each new platted lot in a subdivision, connections to the water system shall be installed so that future connections will not require digging up or tunneling under streets or interruption of service to other connections on the system.

- h. All fire hydrants and distribution lines shall be installed, tested and operational prior to the start of combustible construction.
- i. For purposes of these Regulations, flows and pressures shall be measured at the point of private connection to the distribution system. Should topography dictate, pressures may require augmentation by use of private pressure reducing or pressure boosting devices. Pressure reducing valves will be required if the residual pressure is above 80 p.s.i. measured at the water meter.
- j. All design and construction shall be in accordance with these Regulations, the City's standard water specifications, and the requirements of the Tennessee Department of Environment and Conservation (TDEC), Drinking Water Section. In cases of conflict, the more stringent requirement shall apply.
- k. The more stringent requirement of domestic use or fire flow shall apply.

(3) Fire flow requirements.

- a. "Fire flow" means the amount of water required to extinguish a fire or stabilize a hazardous incident. Minimum needed fire flow requirements shall be 1,000 gpm with a residual pressure of 20 psi.
- b. In areas where the minimum needed fire flow cannot be achieved, automatic fire sprinklers shall be installed in accordance with National Fire Protection Association (NFPA) requirements.

(4) Sanitary sewer and septic tanks.

- a. The applicant shall submit a sewer availability request to staff from the Water and Sewer Department prior to the start of the project and receive confirmation of availability before approval of the preliminary plan.
- b. Where the Board of Commissioners determines that a subdivision is not required to connect to an existing public sewage system, such lots shall not be platted until approval for alternative systems is granted in writing by the county health officer, or an authorized representative.
- c. Sanitary sewer service lines to individual lots shall not be less than six inches in diameter; and may be larger, depending on anticipated flow. The size shall be determined by staff from the Water and Sewer Department.
- d. Sewer service to a development shall be provided by a gravity flow system. Sewer lift stations and/or pressure systems must be approved by staff from the Water and Sewer Department.

(5) Accessibility of sewer and/or water supply system.

a. When a proposed subdivision is not directly adjacent to an area served by a public sewer or water supply system, City staff, shall determine how the subdivider must make connections. If off-site extensions of sewer and water improvements are required of the developer, then the developer may be eligible for credits toward payment of future tap fees in accordance with current city ordinances.

- b. If the development is outside the Brentwood water and sewer service area, the utility providing service will determine requirements for connections to public utility lines.
- 7.10 **Suspended Construction.** When construction of a subdivision is halted for 60 days or more the site shall be stabilized per Chapter 56 of the Municipal Code, the entrances shall be securely and safely blocked, and signs must be posted at any road connections indicating the road(s) is/are closed. During suspended construction the vegetation on the site must be maintained in accordance with Chapter 30, Article II of the Municipal Code. The City reserves the right to make periodic inspections of the site during the suspended period and require the developer to correct deficiencies that are a deemed a nuisance to surrounding properties or public areas.

ARTICLE EIGHT. SECURITY FOR COMPLETION AND MAINTENANCE OF IMPROVEMENTS

8.1 Guarantee in Lieu of Completed Improvements

Before a final subdivision plat may be recorded, all improvements shall be constructed in a satisfactory manner, and approved by the City of Brentwood in accordance with the requirements of Article Five of these Regulations. The applicant shall post a security in an amount equal to 110% of the estimated cost of the remaining required improvements, based upon the amount of work completed and stipulated by City staff as sufficient to secure the satisfactory construction, installation, and dedication of the required remaining improvements. Security provided in accordance with this section shall be sufficient to provide for the completion of utilities and other improvements. The City may accept security in an amount whereby improvements may be made and utilities installed without cost to the City in the event of default of the subdivider. The security instrument shall comply with all statutory requirements and shall be satisfactory to the City Attorney as to form, sufficiency, and manner of execution as set forth in these Regulations.

The following requirements shall apply to any security posted with the City pursuant to this article:

- (1) **General.** Before a final plat of a subdivision which requires improvements can be recorded, the owner or developer must enter into a Performance Agreement with the City, in accordance with these Subdivision Regulations (See Appendix Five).
- (2) **Security Instrument.** The security instrument shall reference the performance agreement, which shall stipulate the work to be performed by general categories and the estimated value or cost of each category. The performance agreement shall also stipulate a completion date for all of the work to be performed. Any changes or extensions to the timeframe or other stipulations as detailed within the performance agreement must be reviewed and approved by the Planning Commission.
- (3) **State of Tennessee Bank Collateral Pool.** The security shall be issued by a financial institution, which is currently a member of the State of Tennessee Bank Collateral Pool, as maintained by the State of Tennessee Treasury Department.
- (4) **Form of Security.** The security instrument shall express the value in a total amount equaling the sum of all work categories, and shall be in one of the following forms:
 - a. Irrevocable Standby Letter of Credit. Issued by or confirmed by a financial institution which is a member of the Tennessee Bank Collateral Pool and located in Williamson County, Tennessee, or an adjoining county. Any such letter of credit shall bear an initial term of at least 24 months, (See Appendix Four). The approved financial institution shall have an office or branch located in the State of Tennessee and shall authorize the surety to be presented for demand or draw at a place physically located within a 60 mile radius of the city limits of Brentwood, Tennessee.
 - b. *Cashier's or Certified Check*. Issued by a financial institution, which is a member of the Tennessee Bank Collateral Pool, and shall be non-expiring. All Cashier's checks accepted by the City shall be deposited into a special escrow account which will be used to complete the required improvements within a specified project (residential or commercial) should the developer fail to complete the required improvements. Upon completion of all required improvements and completion of the required

maintenance period, if applicable, the remaining amount, less any necessary draws shall be returned to the developer.

The Letter of Credit option shall not be available to an applicant whose past performance has resulted in breached or expired securities.

- Issuing Bank Rating. Either instrument must be from an approved financial institution having a "C" or better rating as shown in the latest edition of the LACE Quarterly Financial Institution Ratings guide compiled by the LACE Financial Corporation or its successors. An alternate rating issued by Standard & Poor's (S&P), Moody's Investor Service or Fitch Ratings shall be accepted by the City. Should the developer/subdivider elect to obtain an alternate rating using one of the companies shown above, the issuing financial institution shall have a minimum credit rating of "A" at the time of the submittal of the surety to Planning Department staff. The subdivider shall furnish applicable ratings data for the issuing financial institution with the submittal of the final subdivision plat. In no instance will ratings provided by an Internet bank rating company be accepted. Additionally, documentation detailing the issuing financial institution's stability will be required as part of the submittal. All applicable costs associated with providing the alternate rating shall be borne by the developer/subdivider. Approval of the security instrument, by the Finance Director shall be required before the subdivision plat may be recorded.
- (6) **Completion of Improvements.** The period within which the required improvements must be completed shall be specified by the City and incorporated within the security instrument. Any changes or extensions to the timeframe or other stipulations as detailed within the performance agreement must be reviewed and approved by the Planning Commission.
- (7) **Required Rating.** Should the LACE rating of the issuing financial institution fall below a "C" and/or the alternative credit rating from S & P, Moody's or Fitch falls below an "A" credit rating, the City shall provide written notification to the developer/subdivider to secure a new instrument that meets the requirements of these Regulations within 90 days of the date of the notification. If a new instrument is not in place within 90 days of the City's notification the City shall immediately process a draw on the letter of credit.
- (8) **Second Bank Confirmation.** Since a letter of credit represents the obligation only of the issuing bank, a confirmation shall be required stating that a line of credit has been secured from the confirming financial institution, when the financial ratings of the issuing bank falls below those specified as part of these Regulations, or when other ratings or reports are published that indicate the strength of the issuing bank is at risk, or the distance from the City of Brentwood of the branch office authorized to accept draws is more than 60 miles. All documents presented by the confirming bank shall conform to the requirements of the original letter of credit and shall acknowledge the obligation of the confirming bank to assume the same responsibilities as the issuing bank. Including the obligation to pay against presented documents. Payment from the confirming bank must be guaranteed regardless of the stability of the issuing bank. In lieu of a confirmation, a new letter of credit from a financial institution meeting these Regulations may be required.
- (9) **Inspections/Reductions.** The progress of the improvements shall be reviewed at least once a year by City staff, at which time the amount and expiration date of the security may be increased, reduced or extended, or the security may be released in recognition of significant work having been completed. If a reduction in the amount of the security for a platted subdivision is requested at any other time during the year by the applicant, a five hundred dollar (\$500.00) fee will be charged to defray inspection, processing and administrative costs. If for any reason, the security is not renewed or extended as required

by the Planning Commission within thirty (30) days prior to the expiration date, or if the new documentation submitted is not in accordance with the requirements set forth herein, then the security will be assumed to be in default and the drawing on the security, in its full amount may be completed by City staff.

Staff from the Engineering Department shall be authorized to approve partial reductions in the amount of the security, provided:

- a. No more than one (1) partial reduction shall be approved in the amount of the performance security instrument during the construction of the subdivision or section thereof. Partial reductions shall be authorized upon completion of an inspection by staff from the applicable City Departments and only if significant work has been completed since the initial submittal of the security. No reduction will be allowed until installation of the final asphaltic topping on the streets within the development has been completed.
- b. In no event shall the amount of the security instrument be reduced to a level which, in the opinion of staff from the Engineering Department, would not allow for completion the subdivision, or affected section.
- (10) **Letter of Credit Criteria.** All letters of credit accepted for security for required improvements shall meet the following standards, as applicable;
 - a. The initial term of the letter of credit shall be for a minimum of two (2) years from date of the recording of the final plat and shall be renewed as detailed within the performance agreement until project completion.
 - b. All letters of credit shall include an automatic renewal clause that provides at least 90 days advance notice of any decision by the issuing financial institution not to extend the document's expiration date.
 - c. The initial expiration date shall not fall on a weekend day, or national bank holiday.
 - d. The following language (or substantially similar language, acceptable to the City) shall be included on all letters of credit accepted for subdivision or commercial building improvements by the City of Brentwood. The blanks shall be completed appropriately.

We hereby issue this Irrevocable Standby Letter of Credit in your favor which is available at sight by drafts on <u>(Name of Bank)</u>, bearing the clause "Drawn under Irrevocable Standby Letter of Credit Number _____", accompanied by:

Beneficiary's statement signed by one of its officials stating "(Name of the developer) has failed to complete certain improvements and/or has failed to obtain written authorizations for release from all affected agencies for the development project known as (Name of the project)."

e. Partial drawings shall be permitted.

f. The following statement shall be included on all letters of credit;

"The City may complete draws on this Letter of Credit by delivery via Registered or Certified mail, Federal Express or other similar courier service, or by facsimile drawing with the required presentable by facsimile to __(Facsimile #)_, or by electronic mail to the following address

- g. All letters of credit must include a statement detailing the improvements for which they were originally issued.
- h. Should a security instrument expire it remains the developer's responsibility to replace the security instrument of complete the remaining outstanding work as identified the approved construction plans.
- (11) **Security Instrument.** The security instrument shall name the City of Brentwood as obligee and shall be satisfactory to the City Attorney as to form, sufficiency and manner of execution.
- (12) **Term of Security Instrument.** The security instrument shall remain in force in its full face amount, subject to any reductions permitted hereunder, until all public improvements are completed and accepted for maintenance where applicable, by the City.
- (13)Erosion Control. An initial security for erosion control measures and off-site drainage improvements, shall be provided by the developer if applicable. This security shall conform to all guidelines outlined within these Regulations. Erosion control and off-site drainage security instruments shall be posted at an amount as calculated by staff from the Engineering Department. The security instrument must be in place before a grading permit will be issued. The security will remain in place, with no reductions, until such time as the Director of Engineering or his designee determines that erosion control is no longer needed. At any time, should the erosion control or off-site drainage be determined by the Director of Engineering or his designee to be ineffective, or in need of maintenance, the developer shall be notified and given 24 hours to take the necessary corrective action. After one incident, the City may select a approved contractor to correct the deficiencies without prior notification to the developer. Costs for the corrections will be drawn from the posted security and will be the responsibility of the developer. If, at any time, the amount of the security instrument falls below the current estimate of the cost to complete the work, the developer shall post new or additional security in the amounts required by the Director of Engineering or his designee. Failure to post security instrument in the required amount will result in the withholding of additional permits and/or approvals, including certificates of occupancy.

8.2 Failure to Complete Improvements.

In cases where a security instrument has been posted and required improvements have not been completed within the terms of such security instrument, or the requirements of these subdivision Regulations, City staff may declare the security to be in default and require that all the improvements be installed, regardless of the extent of the building development, or the expiration date of the security instrument, at the time the security is declared to be in default. The funds from the security shall be used to complete the improvements and or to reimburse the City for any and all expenses that may be incurred to complete the improvements. In the event the security instrument does not adequately cover the costs incurred by the City to complete the improvements, the Planning and Codes Director may place a hold on the issuance of building permits for those lots within the development, which have not had permits issued

for construction until such time as the developer has reimbursed the City for the total cost of the improvements, including legal and administrative costs.

8.3 Completion of Approved Facilities within Designated Open Space Areas.

All facilities and improvements proposed for construction or installation by the developer in any designated open space areas shall be completed by the developer or the developer's successor in interest, unless otherwise approved by the planning commission. All such facilities and improvements shall be fully secured, with a letter of credit or other surety acceptable to the City Attorney prior to the recording of the first platted section of the subdivision to ensure completion in accordance with the approved development plan and within the overall timetable for such improvements if the developer fails to complete such obligations.

8.4 Inspection/Testing of Improvements.

If it is determined by inspection that any required improvements have not been constructed in accordance with the City's construction standards and specifications, the applicant shall be responsible for completing the required improvements in accordance with the adopted standards. Wherever the cost of improvements is covered by a security instrument, the developer and the issuing financial institution shall be jointly liable for the cost of completing the improvements according to the approved specifications.

8.5 Maintenance Security.

Upon release of a security instrument, guaranteeing completion of the improvements, the City shall require a maintenance security in an amount as determined by staff from the appropriate City departments. Said maintenance security shall remain valid for a period of time as stipulated within the performance agreement and shall be, subject to the standards established in this Article.

8.6 Maintenance of Improvements.

The applicant shall be required to maintain all improvements including all lot improvements, until acceptance of the public improvements by the City or other appropriate entity.

68

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ARTICLE NINE. ADMINISTRATION

9.1 Interpretation, Conflict and Separability.

- (1) **Interpretation.** In the interpretation and application of the Subdivision Regulations, the provisions of these Regulations shall be held to be adopted for the health, safety, and general welfare of the citizens of the City of Brentwood.
- (2) **Provisions.** These Regulations are not intended to interfere with, abrogate, or annul any other resolution, ordinance, rule or regulation, statute, or other provision of law. Where any provision of these Regulations imposes restrictions different from those imposed by any other provision of these Regulations or any other resolution, rule or regulation, or other provision of law, the provisions that are more restrictive or impose higher standards shall control.
- (3) **Private Provisions.** These Regulations are not intended to abrogate any easement, covenant or any other private agreement or restriction, provided that where the provisions of these Regulations are more restrictive or impose higher standards or regulations than such easement, covenant, or other private agreement or restriction, the requirements of these Regulations shall govern. Where the provisions of any easement, covenant, or private agreement or restriction impose duties and obligations more restrictive or standards that are higher than the requirements of these Regulations, or the determinations of the Planning Commission or the City in approving a subdivision or in enforcing these Regulations, and the private provisions are not inconsistent with these Regulations, then the private provisions shall be operative and supplemental to these Regulations and the determinations made under these Regulations.
- (4) **Severability.** If any part or provision of these Regulations or application thereof to any person or circumstances is adjudged invalid by any court or competent jurisdiction, such judgment shall be confined in its operation to the part, provision, or application directly involved in the controversy in which such judgment shall have been rendered and shall not affect or impair the validity of the remainder of these Regulations or the application thereof to any other person or circumstances. The Planning Commission hereby declares that it would have enacted the remainder of these Regulations even without such part, provision, or application.

9.2 Saving Provision.

These Regulations shall not be construed as abating any action now pending under, or by virtue of prior existing Subdivision Regulations, or as waiving any section or provision existing at the time of adoption of these Regulations or amendments, or as vacating or annulling any rights obtained by any person, firm, or corporation by lawful action of the City, except as shall be expressly provided for in these Regulations.

9.3 Vacation of Plats.

- (1) **General.** The vacation of a plat means that the plat is being destroyed and all public rights in the streets, alleys, public grounds, and all dedications laid out or described in the plat are being divested. A plat or any part of a plat may be vacated by the owner of the property, only as set forth in this section.
- (2) **Procedure.** No plat may be vacated unless the vacation is approved by the Planning Commission. Any vacation which abridges or destroys any public rights to the use of any

property or any completed streets, alleys or other improvements shall also be submitted to the Board of Commissioners for approval.

- (3) **Recordation.** An instrument evidencing the vacation of the plat shall be executed by the owners, acknowledged; and approved, by the City; and recorded in like manner as plats of subdivisions; and being duly recorded shall operate to destroy the force and effect of the recording of the plat so vacated, and to destroy all public rights in the streets, alleys, and public grounds, and all dedications laid out or described in such plat, except as may be reserved in such instrument.
- (4) **Vacating Transferred Lots.** When lots have been sold, the plat may be vacated in the manner established herein, provided by all the owners of lots in such plat shall join in the execution of such writing.
- (5) **Refund of Fees or Donations**. Regardless of the disposition of the plat vacation petition, the developer or the developer's successors will have no right to a refund of any monies, fees, or charges paid to the City nor to the return of any property or consideration dedicated to or delivered to the City except as may have previously been agreed to by the City and the developer.

9.4 Enforcement.

- (1) **General.** The enforcement of these Regulations and penalties for the unapproved subdivision of land are authorized by public acts of the State of Tennessee. The Planning and Codes Director or his designee shall be responsible for investigating repeated violations of these Regulations, and may refer violations to the City Attorney for legal action.
- (2) **Submission of Subdivision Plat for Approval.** No plat or plan for the subdivision of land into two (2) or more lots or tracts within the City of Brentwood shall be admitted to the land records of Williamson County or received or recorded by the 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, <u>Tennessee Code Annotated</u>.
- (3) Acceptance of and Improvement of Unapproved Streets. Pursuant to Section 13-4-307, Tennessee Code Annotated (and except as provided therein) no board, public official, or authority shall accept, lay out, open, improve, grade, pave or light any street or lay or authorize water mains or sewers or connection to be laid in any street within the City of Brentwood, unless such street shall have otherwise received the legal status of a public street prior to the adoption of these Regulations, or unless such street corresponds in its location and lines to a street shown on a subdivision plat approved by the planning commission.

9.5 Penalties.

(1) **Transferring Lots in Unapproved Subdivisions**. Per Section 13-4-306, <u>Tennessee Code Annotated</u>, whoever, being the owner or agent of the owner of any land, transfers, 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 Brentwood Planning Commission and obtained its approval and before such plat be recorded in the office of the county register, commits a Class C misdemeanor; 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 City, through the City Attorney or other official designated by the Board of Commissioners, may enjoin such transfer or sale or agreement by action or injunction.

9.6 Amendments.

For the purpose of providing for the public health, safety, and general welfare, the Planning Commission may amend the provisions imposed by these Subdivision Regulations. The Planning Commission shall hold public hearings on all proposed amendments as required by State law.

9.7 Variances.

- (1) **General.** Where the Planning Commission finds that extraordinary hardships or practical difficulties may result from strict compliance with these Regulations, and the purposes of these Regulations may be served to a greater extent by an alternative proposal, it may approve variances to the Subdivision Regulations so that substantial justice may be done and the public interest secured. A variance shall not have the effect of nullifying the intent and purposes of these Regulations, and the Planning Commission shall not approve a variance unless it shall make findings, based upon the evidence presented to it in each specific case, that:
 - a. The granting of the variance will not be detrimental to the public safety, health, or welfare, or injurious to other property or improvements in the surrounding area;
 - b. The conditions upon which the request for a variance is sought, and are not applicable generally to other property;
 - c. Because of the particular physical surroundings, shape or topographic conditions of the specific property involved, or because of other extraordinary conditions specific to the property, a particular hardship to the owner would result, as distinguished from a mere inconvenience if the strict letter of these Regulations is carried out; and
 - d. The variance will not in any manner vary the provisions of the Zoning Ordinance, comprehensive plan, or official Zoning map.
- (2) **Conditions.** In approving variances, the Planning Commission may require such conditions as will, in its judgment, secure substantially the objectives, standards, and requirements of these Regulations.
- (3) **Procedures.** A separate written request for any such variance shall be submitted along with the initial filing of the related subdivision action for consideration by the Planning Commission. The written request shall state fully the grounds for the variance, and all facts relied upon by the applicant.

9.8 Appeals

For matters falling within the scope of the regulation powers granted to the Planning Commission by <u>Tennessee Code Annotated</u>, Title 13, Chapter 4, any person or persons, or any entity aggrieved by any decision, finding or interpretation of the Planning Commission may seek review by the appropriate court of record of such decision, finding or interpretation, in the manner provided by the laws of the State of Tennessee. Administrative appeals of staff interpretations regarding the general application of regulations and standards contained herein shall be appealed to the Planning Commission.

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ARTICLE TEN. ADOPTION AND EFFECTIVE DATE

10.1. Generally

- (1) Before adoption of these subdivision regulations, a public hearing as required by Section 13-4-303, Tennessee Code Annotated, was held on December 7, 2009.
- (2) These rules and regulations shall be in full force and effect from and after their adoption and effective date.

,	and effective date.	
	Adopted by the Planning Commission:	
		Secretary, Planning Commission
		Date
		Effective Date

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APPENDIX ONE. DEFINITIONS AND ACRONYMS

Usage.

For the purpose of these Regulations certain numbers, abbreviations, terms, and words shall be used, interpreted, and defined as set forth in this Article.

Unless the context clearly indicates to the contrary, words used in the present tense include the future tense and words used in the plural include the singular.

Words and Terms Defined.

AASHTO. The American Association of State Highway and Transportation Officials.

ADA. The Americans with Disabilities Act.

Alley. A public or private right-of-way primarily designed to serve as secondary access to the side or rear of those properties whose principal frontage is on some other street.

Applicant. The owner of land proposed to be subdivided or their representatives who shall have express written authority to act on behalf of the owner. Consent shall be required from the legal owner of the premises.

Arterial Street. A continuous highway or system of highways, carrying heavy and relatively fast traffic, which connects cities and currently absorbs collector traffic, as shown on the major thoroughfare plan of the city.

ASTM. The American Society for Testing and Materials.

Base Flood The flood having a one percent chance of being equaled or exceeded in any given year.

Best Management Practices. That combination of conservation measures, structures or management practices that reduces or avoids adverse impacts of development on an adjoining site's land, water or waterways or water bodies.

Bike Route Plan. A plan, developed by the City identifying the location and alignment of all bikeways, bike routes and other trail systems.

Buffer. A naturally vegetated area or vegetated area along the exterior boundaries, of an entire development processed in accordance with a multiphase or phased subdivision application which is landscaped and maintained as open space in order to eliminate or minimize conflicts between such development and adjacent land uses.

Building Envelope. The area formed by the front, sides and rear building setback lines of a lot within which the principal buildings or other structures must be located.

Certify . Whenever these Regulations require that an agency or official certify the existence of some fact or circumstance, the municipality by administrative rule may require that such certification be made in any manner, oral or written, which provides reasonable assurance of the accuracy of the certification.

CFS, Cubic Feet per Second.

CIP Capital Improvements Plan, being a plan of proposed capital outlay appropriations and a means of financing them.

City Attorney. The licensed attorney designated by the City to furnish legal assistance for the administration of these Regulations.

Collector Street. an urban street which collects traffic from minor streets and feeds it into the arterial system; includes the principal entrance streets of a residential development and streets for major circulation within such development as shown on the major thoroughfare plan of the city.

Commercial and Service Institution streets. Streets designed to provide access to a platted commercial development consisting of more than one business, industry or commercial establishment or service institution use (as designated by the Zoning Ordinance).

Common Ownership. Ownership by the same person, corporation, firm, entity, partnership, or unincorporated association; or ownership by different corporations, firms, partnerships, entities, or unincorporated associations, in which a stockbroker, partner, or associate, or a member of the family owns an interest in each corporation, firm, partnership, entity, or unincorporated association

Concept Development Plan. A generalized plan indicating the boundaries of a tract of tracts under common ownership, and identifying proposed land use, land use intensity and thoroughfare alignment to enable the Subdivider to save time and expense in reaching general agreement with the Planning Commission as to the form of the plan and the objectives of these Regulations.

Construction Plan. The maps or drawings accompanying a subdivision plan or plat and showing the specific location and design of improvements to be installed in the subdivision in accordance with the requirements of the Planning Commission as a condition of the approval of the plat.

Conventional Lot. Lots or property with less than 15 percent (15%) grade and not located in a legally designated floodway overlay district.

Cul-de-Sac. A local street with only one outlet that terminates in a vehicular turnaround and having an appropriate terminal for the safe and convenient reversal of traffic movement.

Dead-end street. A permanent terminus of a local street, and the design shall facilitate turning movement of larger vehicles such as a school bus or fire truck.

Developer. The owner of land proposed to be subdivided or a representative who is responsible for any undertaking that requires review and/or approval under these Regulations. See Subdivider.

DIP. Ductile Iron Pipe

DRC. Development Review Committee

Easement. Authorization by a property owner for another to use the owner's property for a specified purpose.

FEMA. The Federal Emergency Management Agency.

FIPS. Federal Information Processing Standards

Front yard The yard extending across the entire width of a lot between the right-of-way line of a

public street and the front elevation of a principal structure, including covered porches, canopies and carports.

Frontage. That side of a lot abutting on a street or way and ordinarily regarded as the front of the lot; but it shall not be considered as the ordinary side of a corner lot.

GPM. Gallons Per Minute

Grade. The slope as specified in terms of percentage.

HDPE. High-Density Polyethylene (pipe)

Health Safety or General Welfare. The purpose for which municipalities may adopt and enforce land use regulations for the prevention of harm or promotion of public benefit to the community; commonly referred to as police power.

Hillside Protection Overlay. An overlay zoning district established to meet the challenges of development in the higher elevation areas of the city. The district shall include all areas with an elevation of 850 feet or greater. Any development or land disturbance within this area shall comply with the technical and development standards of Division 14 of the Zoning Ordinance and the associated requirements of the underlying zoning district.

IES. Illuminating Engineering Society

Individual Sewage Disposal System. A septic tank, seepage tile sewage disposal system, or any other approved sewage treatment device.

LFE Lowest floor means the lowest floor of the lowest enclosed area (including basement). The lowest floor of a deck shall be the top of the lowest finished surface.

Local Government. The municipality of Brentwood.

Local (Minor) Street. A street whose principal function is to provide access to abutting properties rather than move large volumes of traffic.

Lot. A tract, plot, or portion of a subdivision or other parcel of land intended as a unit for the purpose, whether immediate or future, of transfer of ownership, or possession, or for building development.

Lot Improvement. Any building, structure, place, or other object situated on a lot constituting a physical betterment of real property.

Major Subdivision. The division of land either commercial or residential into multiple lots, where new infrastructure is required.

Minor Subdivision. A minor modification of an existing lot either commercial or residential such as a change in setback or a shift in property line, or a minor division of property into two or more lots where no new infrastructure is required.

Major Thoroughfare Plan The street map adopted by the City, pursuant to law, showing the configuration and classification of existing and proposed streets, and highways.

MPH. The rate of speed measured in miles traveled per hour.

MUTCD. Manual for Uniform Traffic Control Devices.

NAD. North American Datum.

NAVD North American Vertical Datum, 1988

New Development. A project involving the construction, reconstruction, redevelopment, conversion, structural alteration, relocation, or enlargement of any structure; or any use or extension of land, which requires either the approval of a plat pursuant to these Regulations, the issuance of a building permit, or connection to the City's water or sanitary sewer system.

NFPA. National Fire Protection Association.

Non-Residential Subdivision. A subdivision whose intended use is other than residential, such as commercial or industrial.

Off-Site. Any premises not located within the area of the property to be subdivided, whether or not in the common ownership if the applicant for subdivision approval.

Ordinance. Any legislative action, however denominated, of a local government, which has the force of law, including any amendment or repeal of any ordinance.

OSRD. A City of Brentwood zoning district – Open Space Residential Development.

OSRD-IP. A City of Brentwood zoning district – Open Space Residential Development – Innovative Project.

Owner. The person who holds the fee simple title to the property, and the person of persons who have acquired any interest in the property by contract, or purchase or otherwise.

Person. Any individual or group of individuals; or any corporation, general or limited partnership, or other business entity; or any joint venture, unincorporated association, or any other group or organization acting as a unit.

Planned Commercial Development. An interrelated development adhering to a master development plan and located on a single tract of land, or on two or more tracts of land which may be separated only by a street or other right-of-way. A planned development may be characterized by two or more adjoined structures in separate ownership and having zero-foot side setbacks on internal lot lines or by two or more tracts in separate ownership and with separate structures.

Preliminary Plan. The preliminary drawing or drawings, described in these Regulations, developed to identify the location and general relationship between sections, in a phased development, land uses, improvements, structures, circulation systems, landscaping and design elements.

Private Street. Any street that is not publically owned and maintained and used for access by the occupants of a specific development, property owners, their guests and the general public.

Property Owners Association (Homeowners Association). An association or organization, whether or not incorporated, which operates under and pursuant to recorded covenants or deed restrictions, through which each owner of a portion of a subdivision-be it a lot, parcel site, unit plot,

condominium, or any other interest-is automatically a member as a condition of ownership and each such member is subject to a charge or assessment for a pro-rated share of expense of the association which may become a lien against the lot, parcel, unit, condominium, or other interest of the member.

Public Improvement. Any drainage ditch, street, parkway, sidewalk, pedestrian way, tree, lawn, off-street parking area, lot improvement, or other facility for the local government may ultimately assume the responsibility for maintenance and operation, or which may effect an improvement for which local government responsibility is established.

Public Meeting. A meeting of the Planning Commission or Governing Body proceeded by notice, open to the public and at which the public may, at the discretion of the body holding the public meeting is heard.

R-2 A City of Brentwood zoning district – Suburban Residential

Rear yard The yard extending across the entire width of the lot between the rear lot line and the rear elevation of the principal building, including covered porches, canopies and carports.

Registered Architect. An individual registered in the State of Tennessee to practice in the field of architecture.

Registered Engineer. An engineer properly licensed and registered in the State of Tennessee.

Registered Landscape Architect. An individual registered in the State of Tennessee to practice in the field of landscape architecture.

Registered Land Surveyor. A land surveyor properly licensed and registered in the State of Tennessee.

Resubdivision. Any change in a map of an approved or recorded subdivision plat that affects any street layout, any area reserved for public use, any lot line, or that affects any map or plan legally recorded prior to the adoption of any regulations controlling subdivisions.

Right-of-Way. A strip of land acquired by reservation, dedication or condemnation and intended to be occupied by a public road and other public utilities, (Also referred to as Street Right-of-Way width.)

Roundabout. A circular intersection with a raised island that is usually landscaped and located at the intersection of two street legs used to reduce traffic speeds and accidents without diverting traffic onto adjacent residential streets.

Screening. A method of visually shielding or obscuring one abutting or nearby structure or use from another by fencing, walls, berms, or densely planted vegetation.

SCS. The United States Soil Conservation Service

Security Instrument. An Irrevocable Standby Letter of Credit or Cashier's check, that meets the requirements of Article Eight of these Regulations submitted to insure the completion of required improvements, within residential, commercial and service institution projects.

Setback. The minimum distance by which any building or structure must be separated from a street right-of-way or lot line.

Side yard A yard extending along the side lot line from the front yard to the rear yard and

lying between the side lot line and the side elevation of the principal building, including covered porches, canopies and carports.

Sinkhole A hole or irregularly shaped depression usually formed in rock or soil by the action of water that is connected to an underground passage or hollow area.

Site-related facility. An improvement or facility which is for the primary use or benefit of a new development and/or which is for the primary purpose of safe and adequate provision of [identify categories of public facilities for which an impact fee is to be charged] to serve the new development, and which is not included in the capital improvements program and for which the developer or property owner solely responsible under subdivision or other applicable regulations.

Splitter Island. A raised, mountable, triangular island meant to guide traffic and separates the opposing lanes of each street where it intersects a roundabout.

Steep Lots. Lots or property with 25 percent (25%) grade or greater.

Street Classification. For the purpose of providing for the development of the streets, highways and rights-of-way in the governmental unit, and for their future improvement, reconstruction, realignment, and necessary widening, including provision for curbs and sidewalks, each existing street, highway, street, and right-of-way-way, and those located on approved and filed plats, have been designated on the Major Thoroughfare Plan of the City and classified therein. The classification of each street, highway, street, and right-of-way is based upon its location in the respective zoning districts of the local government and its present and estimated future traffic volume and its relative importance and function as specified in the Master Plan of the local government. The required improvements shall be measured as set forth for each street classification on the Major Thoroughfare Plan.

Subdivide. The act or process of creating a subdivision.

Subdivider. Any person who (1) having an interest in Land, causes it, directly or indirectly, to be divided into a subdivision or who (2) directly or indirectly, sells, leases, or develops, or offers to sell, lease, or develop, or advertises to sell, lease, or develop, any interest, lot, parcel site, unit, or plat in a subdivision, or, who (3) engages directly or through an agent in the business of selling, leasing, developing, or offering for sale, lease, or development a subdivision or any interest, lot, parcel site, unit, or plat in a subdivision, and who (4) is directly or indirectly controlled by, or under direct or indirect common control with any of the foregoing.

Subdivision. The division of a tract or parcel of land into two or more lots, sites, or other divisions requiring new street or utility construction, or any division of less than five acres, 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 resubdividing or to the land or area subdivided. In the event the definition of "subdivision" contained within T.C.A. § 13-4-301(4)(B) is amended or replaced, or any other statute hereafter makes another definition of "subdivision" applicable to the city, then such newly adopted definition shall supersede the definition set forth herein.

Subdivision Performance Agreement. A contract entered into by the applicant and the Planning Commission on behalf of the municipality by which the applicant promises to complete the required public improvements within the subdivision in a specified time period following final subdivision plat approval.

Subdivision Plat. The final map or drawing, described in these Regulations on which the subdivider's plan of subdivision is presented and approved by the Planning Commission for approval and which, if

approved, may be submitted to the County Clerk or Recorder of Deeds for filing. (Also referred to as a Final Subdivision Plat.)

T.C.A. The Tennessee Code Annotated

TDEC. The Tennessee Department of Environment and Conservation.

TDOT. The Tennessee Department of Transportation.

Temporary Improvement. An improvement built and maintained by a subdivider during construction of the subdivision and prior to release of the required security.

TMDL. Total Maximum Daily Loads.

Traffic Impact Study. An analysis of the effect of traffic generated by a development on the capacity operations and safety of the public street and highway system.

Transitional Lot. Lots or property having a grade of at least 15 percent (15%), but less than 25 percent (25%) grade.

Travelway. An area intended for traffic, including highways, local streets, private roads, and trafficways within private property area that have some form of traffic control.

TSS. Total Suspended Solids.

USGS. The United States Geological Survey.

WNA. Waterway Natural Area means the area adjacent to, on either side, an intermittent or perennial stream waterway, as determined by the city, state, or USGS topographic information that is to remain in its natural state to protect the quality and ecology of the stream.

Yard The entire area of the lot including front, side and rear yards. The buildable or usable area of the yard is subject to restrictions on the location and placement of structures through the establishment of minimum separation requirements (setbacks) from the adjoining lots and right-of-way and by the recording of public utility and drainage easements.

Zoning Ordinance. Chapter 78 of the City of Brentwood Municipal Code.

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APPENDIX TWO. CONSTRUCTION DRAWINGS - CHECKLIST AND STANDARD DRAWINGS

The developer shall submit to both the Engineering Department and the Water/Sewer Department three (3) sets of construction drawings and applicable engineering calculations stamped by a civil engineer licensed to practice in the State of Tennessee. Upon the initial review by these departments, all comments and corrections will be sent to the developer for correction. Once all the comments are addressed to the satisfaction of the City, the developer will re-submit six (6) sets of plans to be stamped approved for construction.

The following list of plans is an overview of a typical set of construction drawings for submittal purposes:

- (1) Cover Sheet.
 - a. Name of the project.
 - b. Section number or phase of the project.
 - c. Vicinity map scale to be determined by the applicant.
 - d. Name, address, and phone number of the engineering company.
 - e. Name, address, and phone number of the developer.
 - f. List of sheet titles and sheet numbers contained in the construction drawings.
 - g. Date of submittal and list of revision or addendum dates.
- (2) Preliminary Plan. Copy of the current approved preliminary plan as a reference plan.
- (3) Overall Site Grading and Drainage Plan.
 - a. Boundary data of the project area; bearing and distances shall be based on Tennessee State Plane Coordinate System, 4100 ADS Zone: 5301 UTM Zones: 16 and 17, North American Datum (NAD) 83 datum.
 - b. North arrow to specify horizontal datum.
 - c. Topographic data showing two-foot contour intervals and based upon North American Vertical Datum (NAVD) 1988.
 - d. Extend contour information a minimum of 100 feet outside of the boundary of the project.
 - e. Scale shall be a minimum of one inch equals 100 feet.
 - f. Benchmark elevations and locations.
 - g. Lot line bearings and distances; curve data shall include the delta angle in degrees, minutes and seconds, length of curve, tangent length, chord length, and bearing.

- h. Street centerline bearings and distances; curve data shall include the delta angle in degrees, minutes and seconds, length of curve, tangent length, chord length, and bearing.
- i. Area of each lot.
- j. Minimum building setback lines.
- k. Public utility and drainage easements along rights-of-way and lot lines.
- l. Label transitional lots (lots containing 15 percent and greater slopes existing and proposed ground slopes).
- m. Label all open space areas (if applicable).
- n. Label all notable features such as tree masses, cemeteries, fence rows, sinkholes, and ponds.
- o. All wetlands and streams, and provide classification of stream types.
- p. Location of all stream buffers and label widths of no-disturbance areas.
- q. 100-year floodplain from the most recently adopted Flood Insurance Rate Map (F.I.R.M.) or calculated floodplain from a flood study by an engineer licensed in the State of Tennessee; differentiate the floodway and floodway fringe on the drawings.
- r. Label 850-foot and 930-foot contour elevation lines (if applicable).
- s. Location and description of any encroachments on the subject property.
- t. Grading plan, showing the finished grade elevations of streets and lots.
- u. Grading plan for all stormwater quantity and quality control features.
- v. Drainage inlets and piping system.
- w. Drainage schedule of proposed structures including material type, size of pipe, type of grate, inverts of structures, length of pipe and slope.
- x. Location and description of off-site drainage structures and easements including size of pipe, invert elevations, and length of pipe.
- y. Sidewalk locations.
- z. Bike path locations.
- aa. Streetlight locations, details of post and fixture type, the type shall be the same as other sections.
- bb. Drainage schedule table.
- cc. Entrance features including walls, fences and landscaped areas.

dd. Location of all tree protection measures.

(4) Plan and Profile Sheets.

- a. Plan scale shall be a minimum of one inch equals 50 feet.
- b. Profile scale shall be a minimum horizontal one inch equals 50 feet and vertical one inch equals five feet.
- c. Plan view area and profile area.
- d. North arrow.
- e. Centerline and stationing of the street.
- f. Label beginning of vertical curve, point of intersection of slope change, and the end of the curve.
- g. Calculate the K-value of each curve based upon design speed.
- h. Profile the location of any drainage, sanitary sewer, or waterline crossings to verify minimum cover requirements.
- i. Existing ground elevation and finished pavement grade elevation at every 50-foot station on the profile view.
- j. Low point and high point station and elevation of each vertical curve.

(5) Construction Details.

- a. Street typical section.
- b. Curb and gutter section.
- c. Pavement section.
- d. Sidewalk detail.
- e. Underdrain detail.
- f. Drainage inlet and grates detail.
- g. Utility trenches within pavement areas and outside paved areas.
- h. Headwalls.
- i. Stone rip-rap aprons.
- j. Erosion-siltation controls.
- k. Tree protection measures.
- l. Detail of stormwater quality and quantity control features.

- m. Detail of sedimentation controls.
- (6) Erosion-Siltation Control Plans.
 - a. Prepare Pre-Construction site plan of controls and measures to be installed in the initial phase of construction including sedimentation ponds, diversion ditches, silt fences, grassed swales, and construction entrances.
 - b. Provide information to the contractor and owner pertaining to the maintenance and inspection schedule for each control measure as required by the Notice of Coverage.
 - c. Prepare During-Construction site plan showing the relocation of erosion-siltation control measures and additional measures to be installed during various phases of construction.
 - d. Post-Construction site plan.
 - e. Additional measures required for sedimentation controls.
- (7) Traffic Signage Plans.
 - a. Location of stop signs, street name signs, dead-end signs, speed limit signs, and notice signage at the end of temporary turnarounds.
 - b. Detail of the size of sign, size of lettering, typical dimension of the height of sign and post, and distance from the curb.
- (10) Water and Sanitary Sewer Plans.
 - a. Refer to the latest adopted water and sewer specifications of the City of Brentwood.

STANDARD DRAWINGS.

- (1) General: The purpose of this section is to include drawings of details for construction. These drawings are to be used in conjunction with the specifications. Details concerning the construction of sewer and service lines shall be referenced to the "Standard Specifications for Collector Sewers, Service Lines and House Connections for the City of Brentwood, Tennessee." Any special construction problems or conditions not covered by the Specifications or Drawings shall be submitted to the City of Brentwood for approval.
- (2) List of Drawings:

Drawing 28

Drawing 29

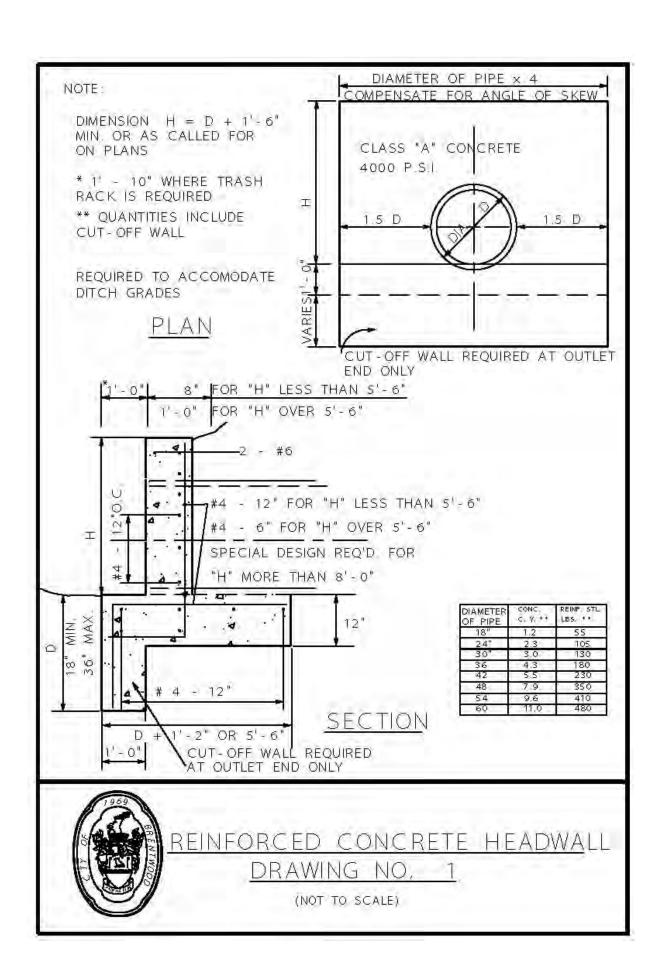
1. The following Standard Drawings are included in this section.

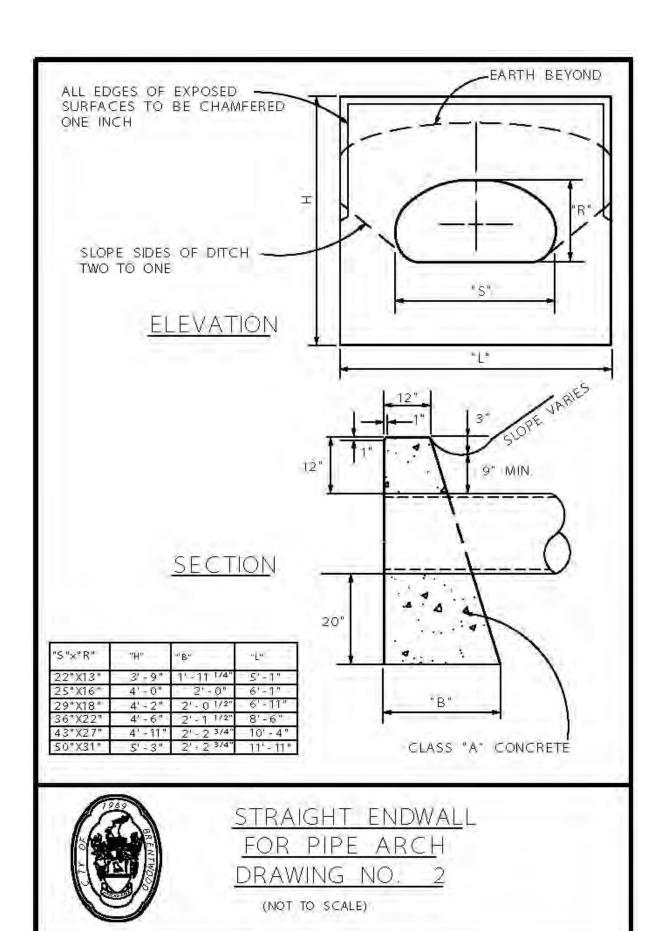
Drawing 1 Reinforced Concrete Headwall Drawing 2 Straight Endwall for Pipe Arch Drawing 3 Straight Endwall for Circular Pipe Standard Concrete Sidewalk Drawing 4 Drawing 5 Standard Driveway Ramps Drawing 6 Standard Curbs and Gutter Drawing 7 **Underdrain Details** Drawing 8 Standard Catch Basin Drawing 9 **Typical Roadway Section** Drawing 10 **Details of Single Inlet Precast** Drawing 11 Area Drain Drawing 12 **Details of Double Inlet Precast** Drawing 13 RESERVED Drawing 14 Detail of Standard Ladder Bars Combination Manhole Inlet Shallow Type Drawing 15 Drawing 16 Combination Manhole - Inlet Drawing 17 **Concrete Protection** Drawing 18 Handicap Ramp Detail Drawing 19 IP Collector With Median-Plan View IP Collector With Median-Cross Section Drawing 20 IP Collector Without Median-Plan View Drawing 21 IP Collector Without Median-Cross Section Drawing 22 Drawing 23 IP Local-Plan View Drawing 24 **IP Local-Cross Section** Drawing 25 IP Local (Abutting Open Space) - Plan View Drawing 26 Roundabout Details Drawing 27 IP Cul-De-Sac - Plan View

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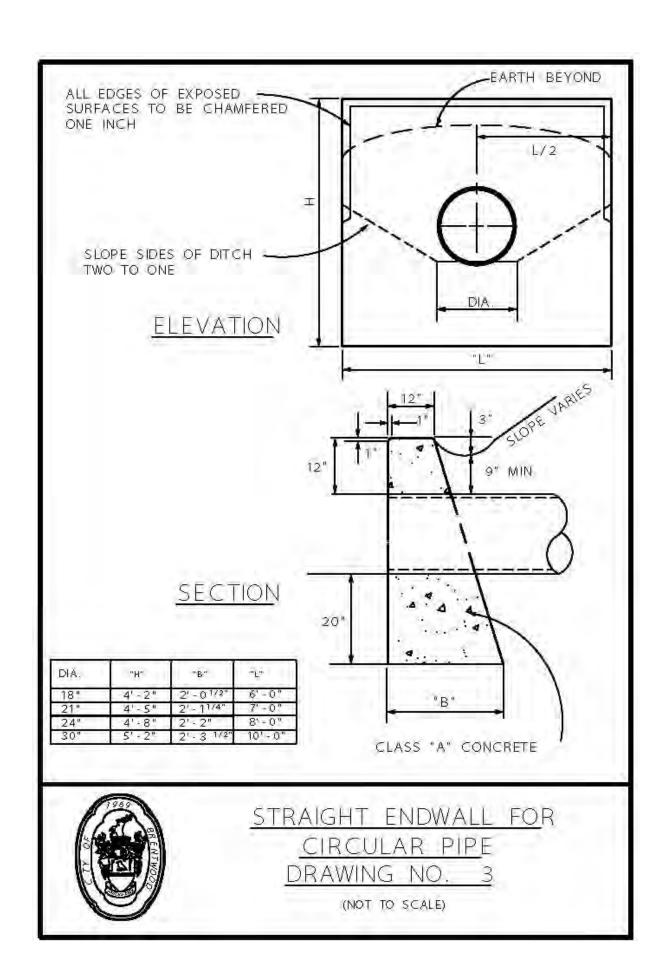
IP Rear Service Lane - Cross Section

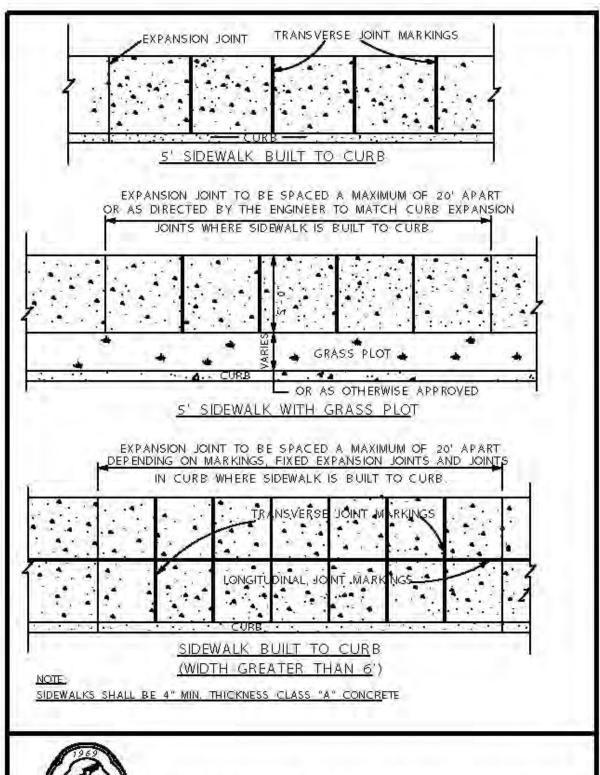
Extruded and Ribbon Curb





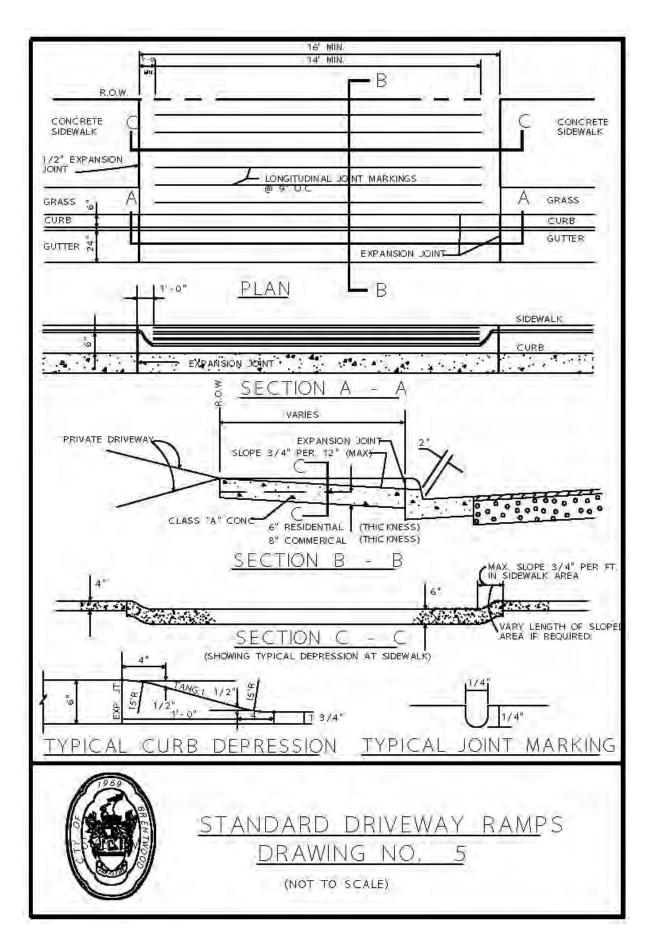


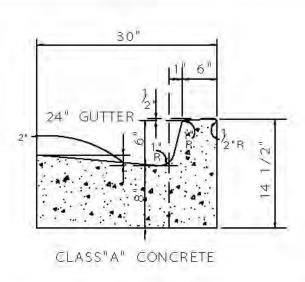




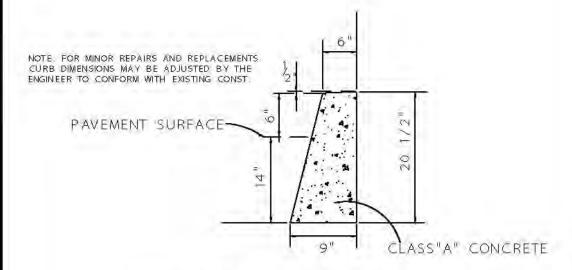


STANDARD CONCRETE SIDEWALK DRAWING NO. 4





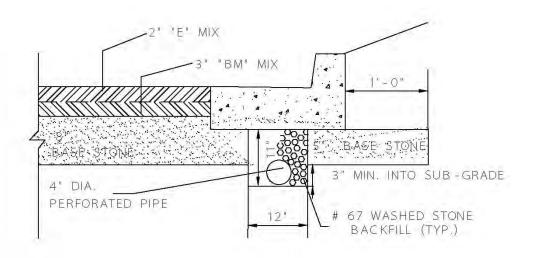
TYPICAL CROSS-SECTION OF CURB & GUTTER

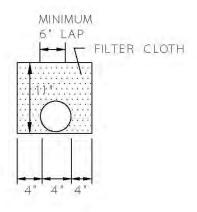


TYPICAL CROSS-SECTION OF CURB WITHOUT GUTTER



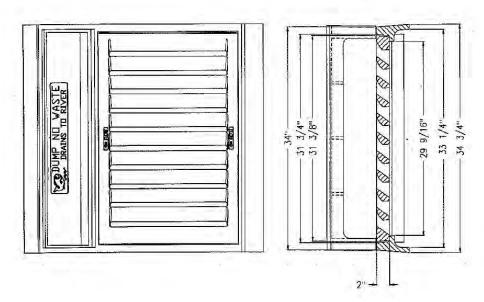
<u>STANDARD CURBS & GUTTER</u> <u>DRAWING NO. 6</u>

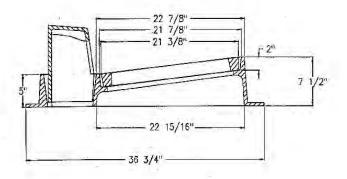






UNDERDRAIN DETAIL DRAWING NO. 7

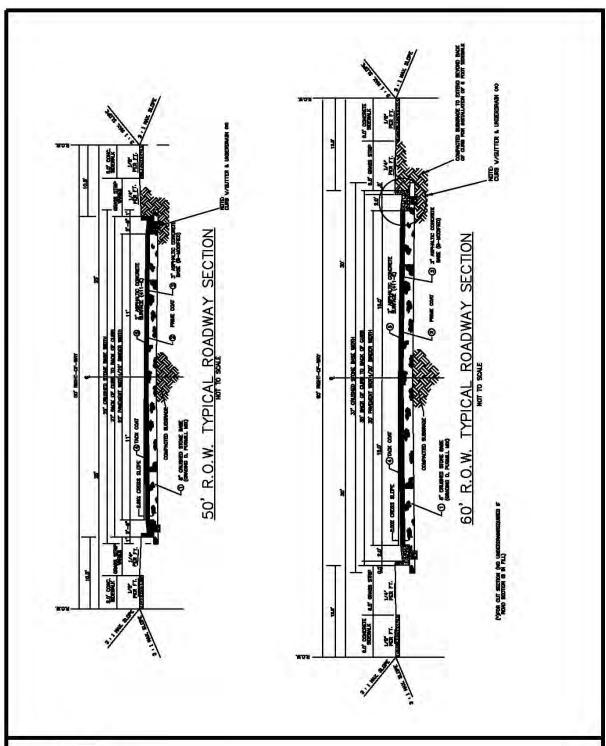




* MODEL 3300-V CURB INLET AS MANUFACTURED BY JBS OR EQUIVALENT. ** OPEN AREA = 1.88 SQ. FT.

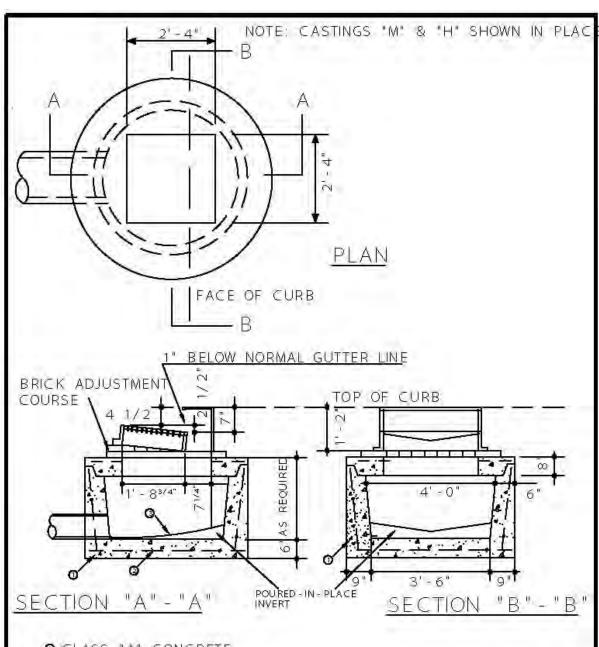


STANDARD CATCH BASIN DRAWING NO. 8





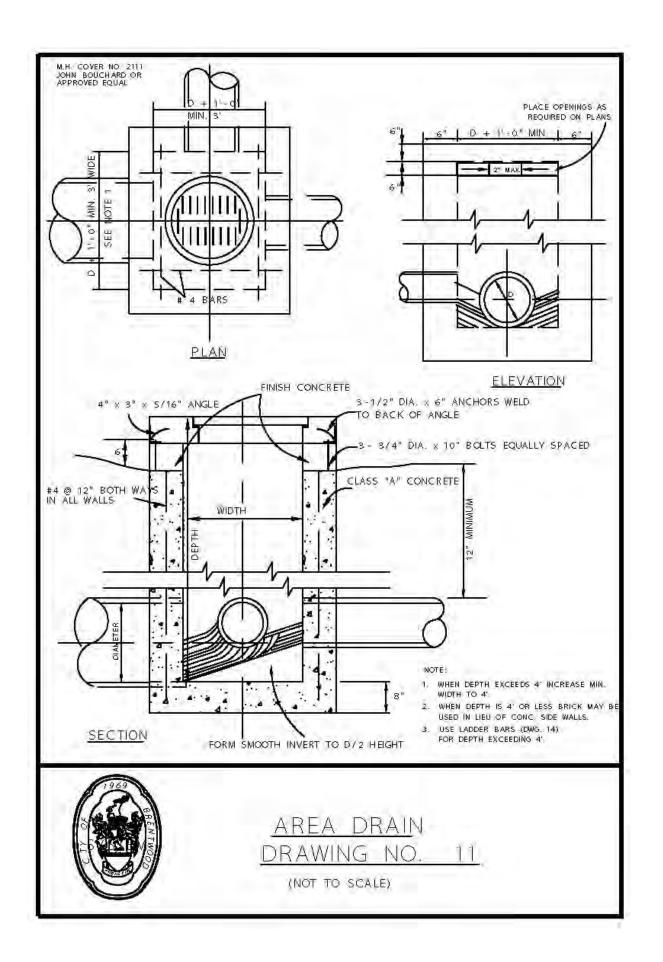
TYPICAL ROADWAY SECTION DRAWING NO. 9

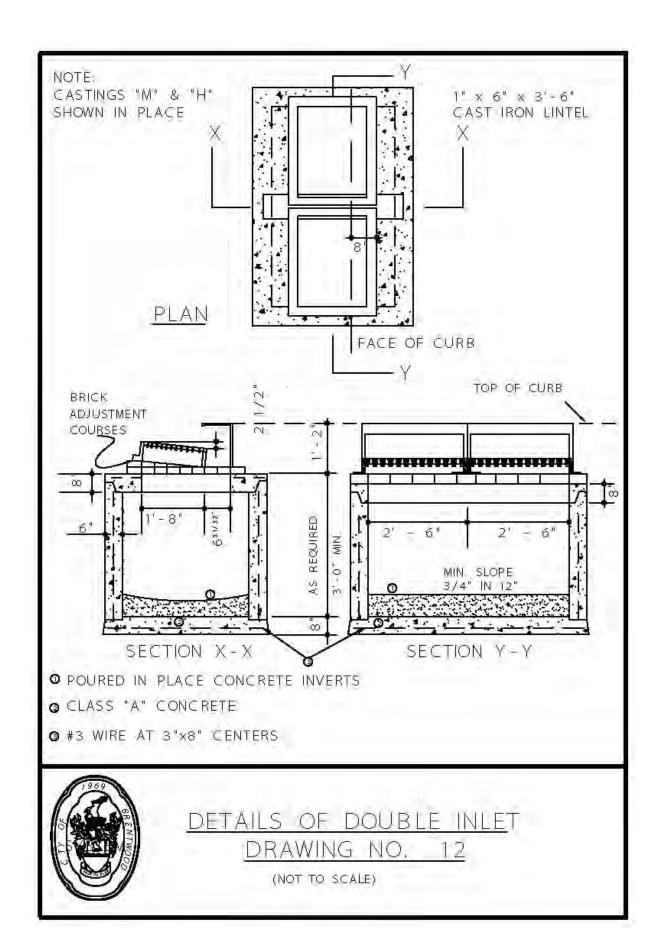


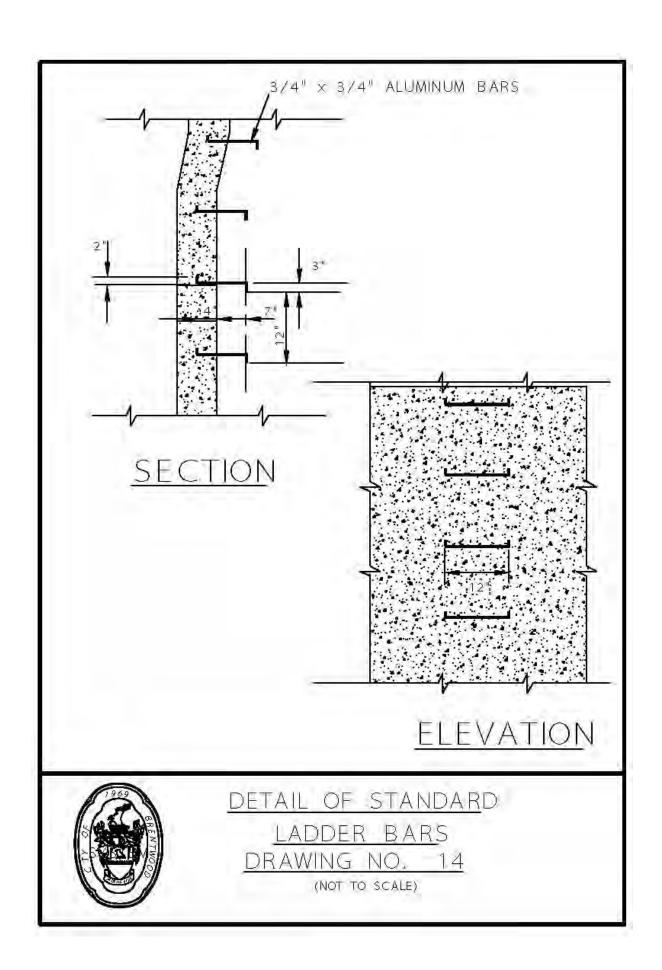
- O CLASS "A" CONCRETE
- @ #6 WIRE AT 3" x 8" CENTERS
- @ MIN. SLOPE 1" = 12"

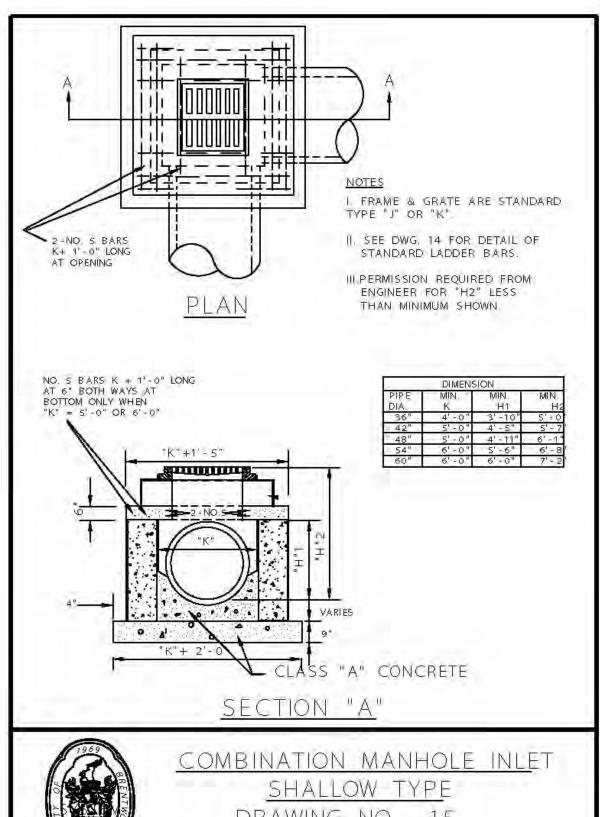


DETAILS OF SINGLE INLET DRAWING NO. 10



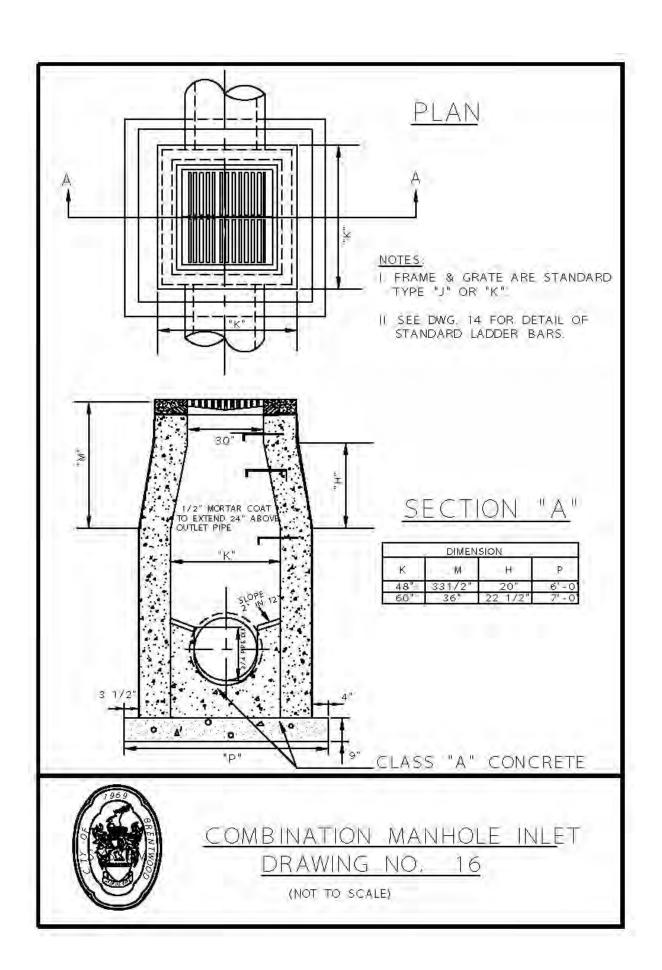


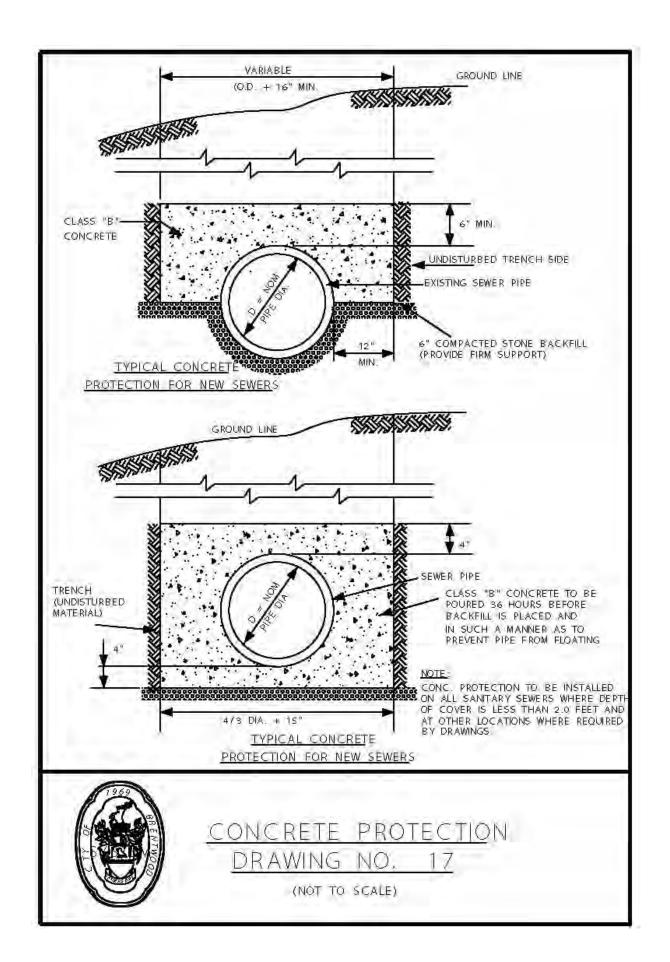


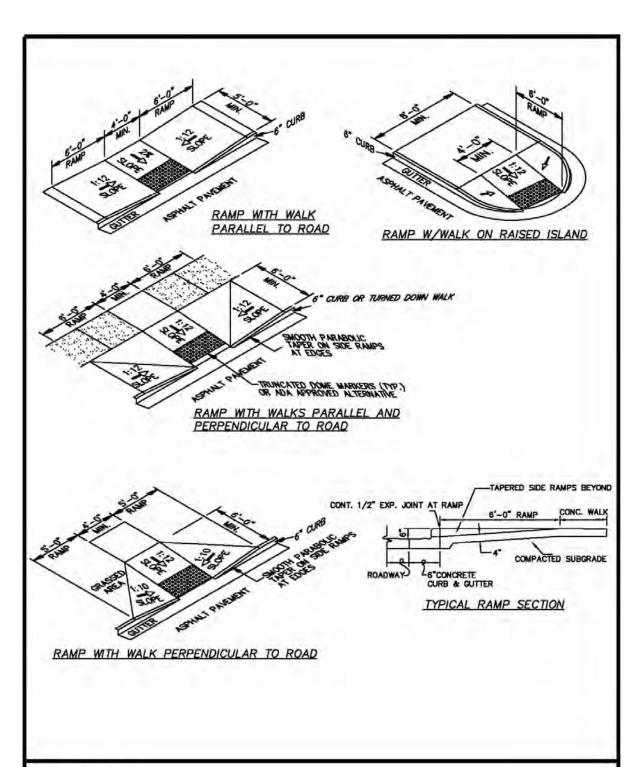




DRAWING

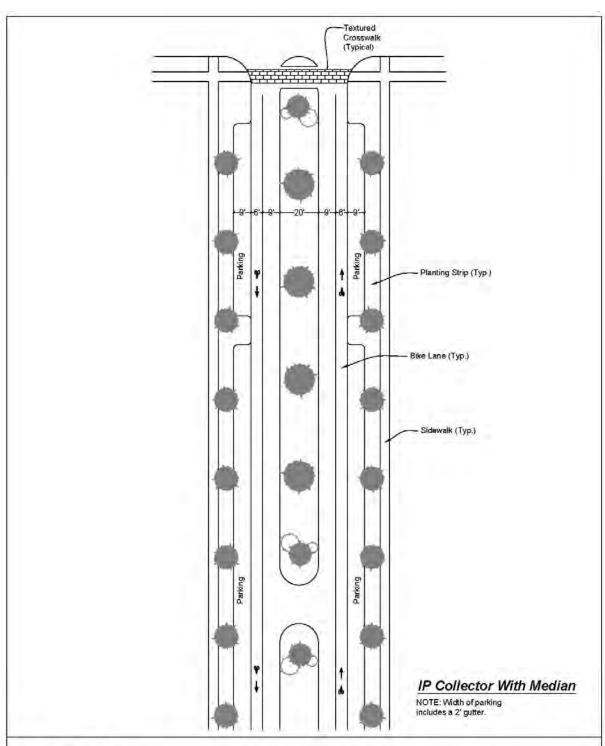






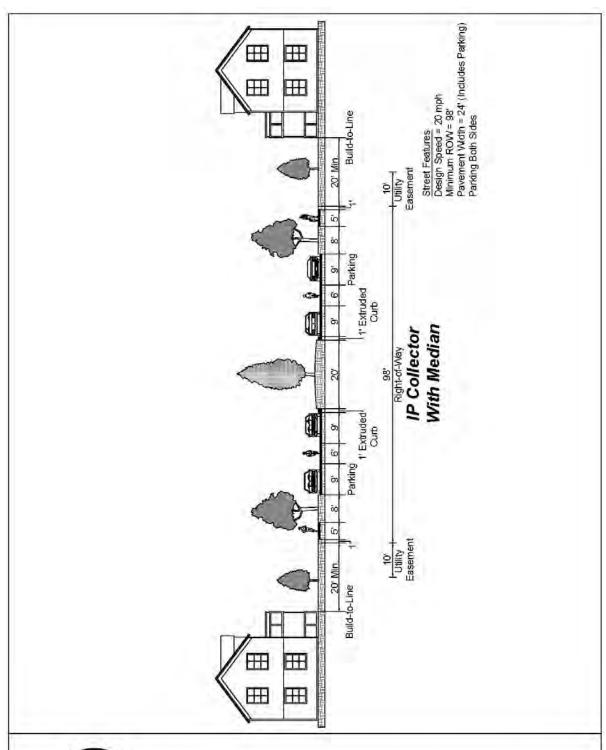


HANDICAP RAMP DETAILS DRAWING NO. 18





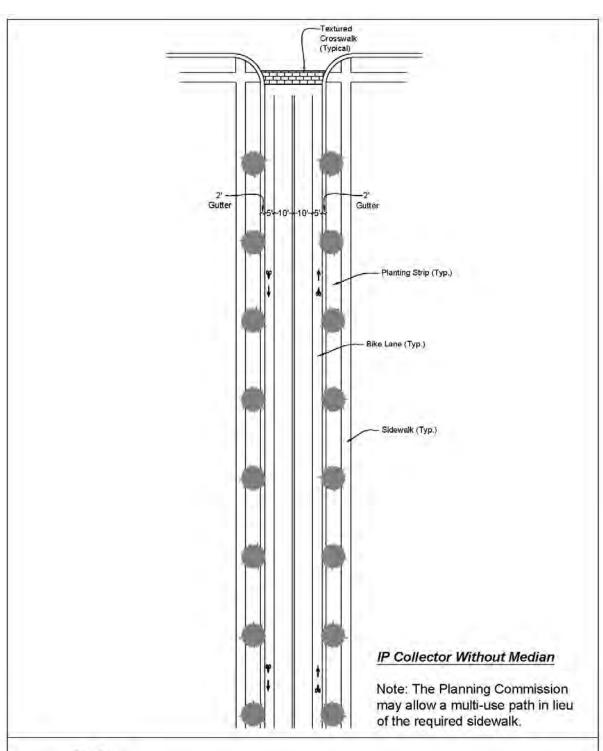
IP COLLECTOR WITH MEDIAN - PLAN VIEW DRAWING NO. 19





IP COLLECTOR WITH MEDIAN - CROSS SECTION

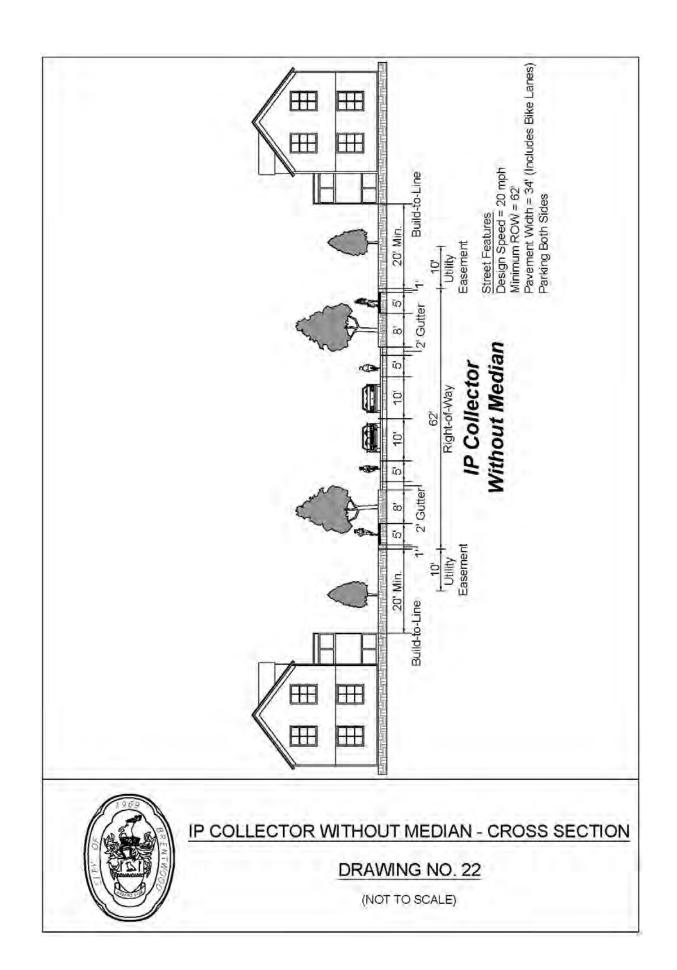
DRAWING NO. 20

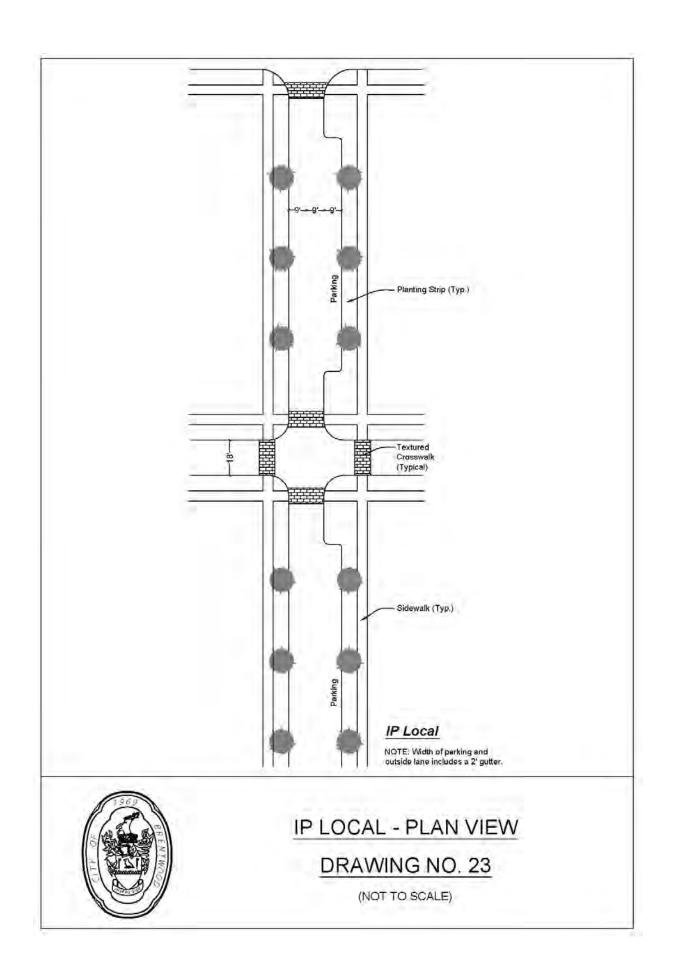


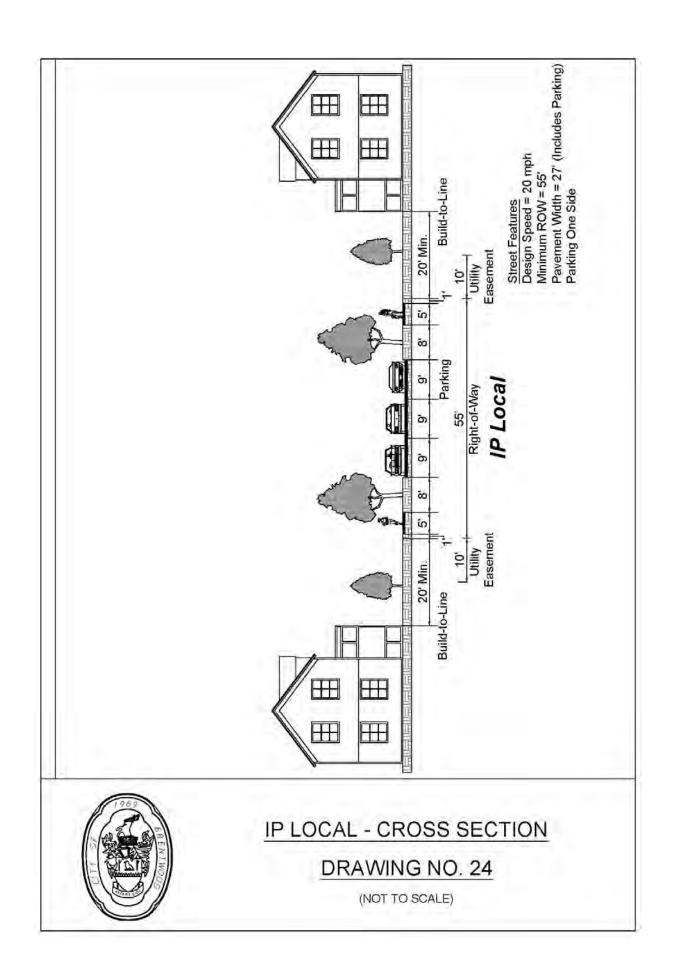


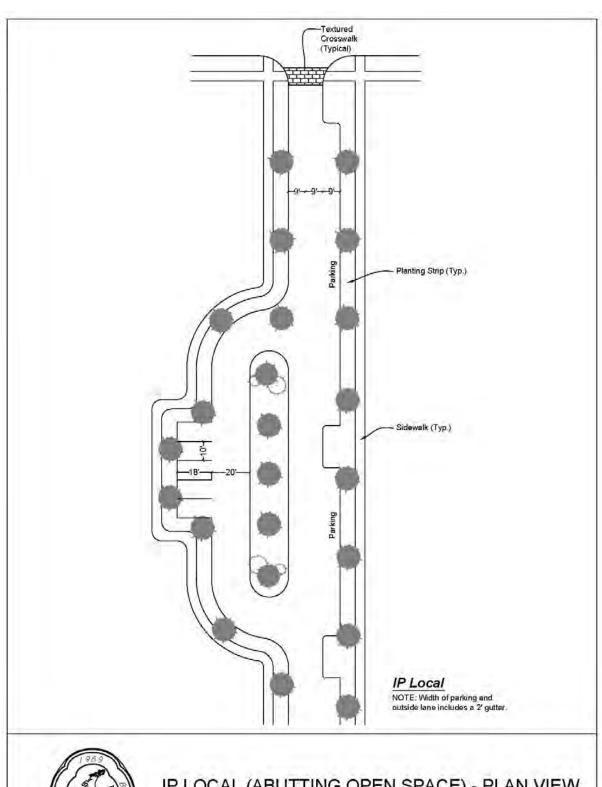
IP COLLECTOR WITHOUT MEDIAN - PLAN VIEW

DRAWING NO. 21



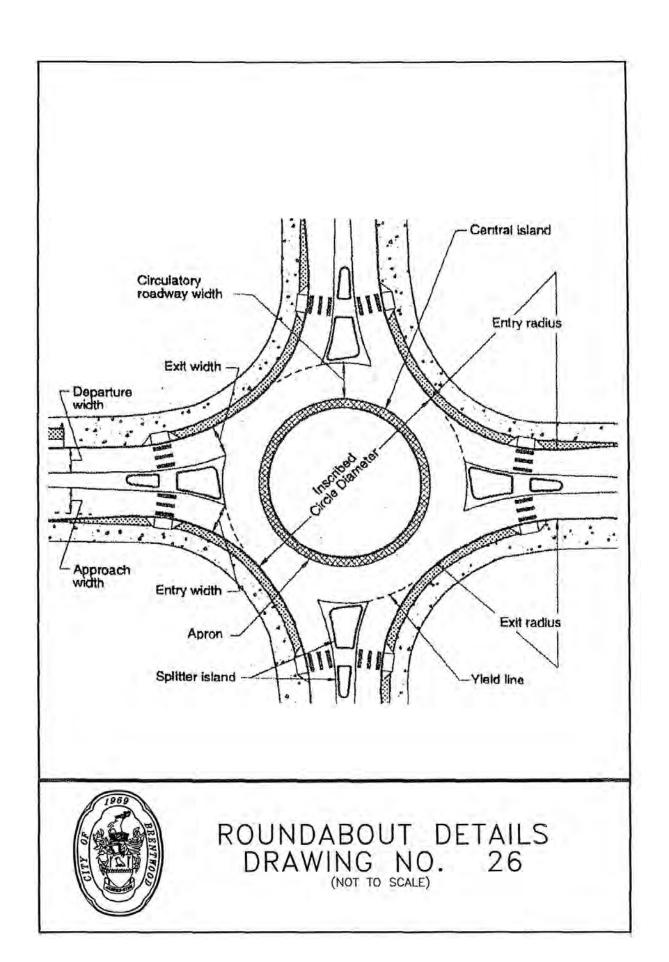


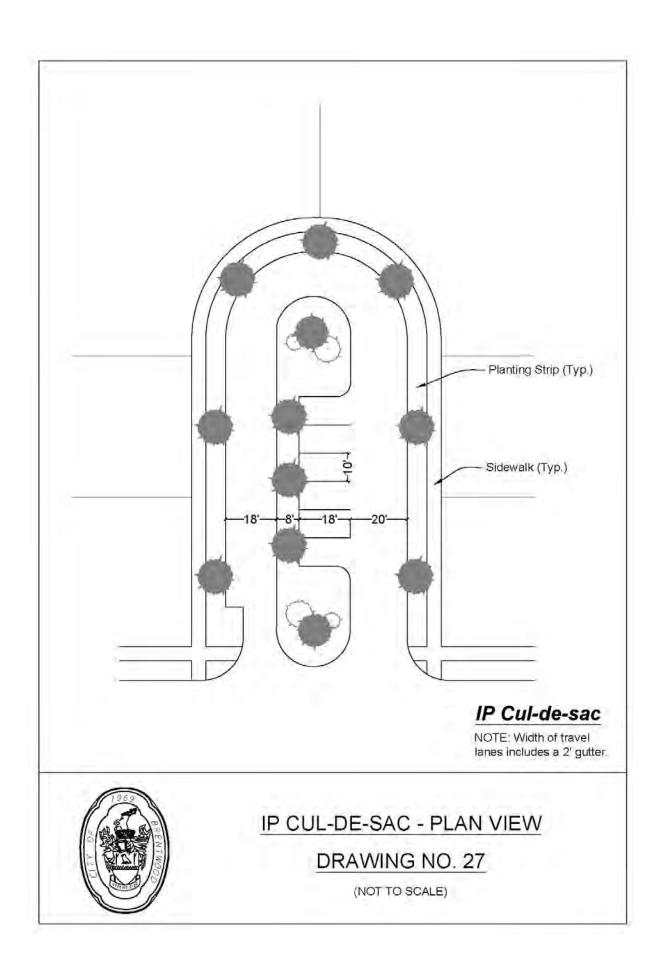


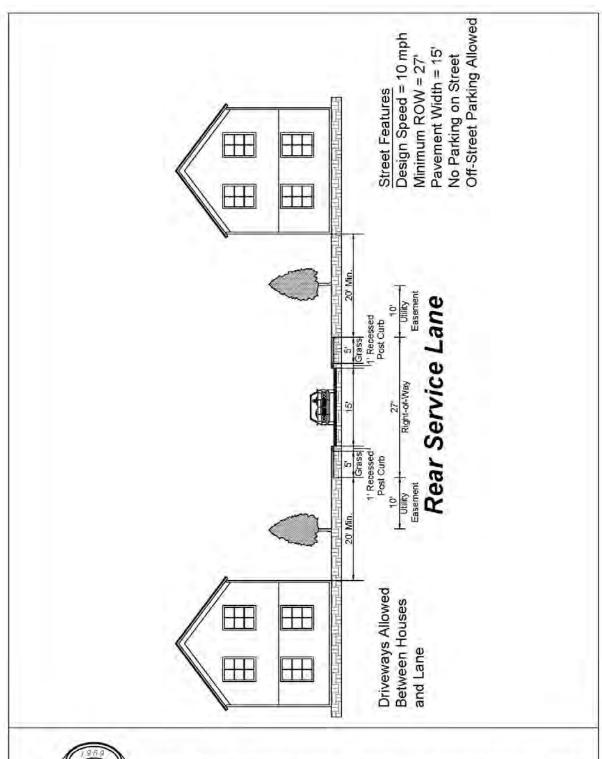




IP LOCAL (ABUTTING OPEN SPACE) - PLAN VIEW DRAWING NO. 25

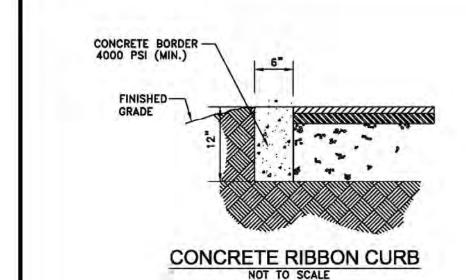


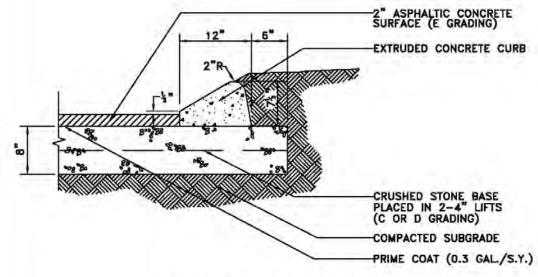






IP REAR SERVICE LANE - CROSS SECTION DRAWING NO. 28





DUTY PAVEMENT NOT TO SCALE



EXTRUDED & RIBBON CURB DRAWING NO. 29

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APPENDIX THREE. FORMS FOR FINAL PLAT CERTIFICATIONS.

The City of Brentwood is served by a number of utility providers. Each may have adopted specific wording and/or certificates designed to address their individual needs. Additional certifications may be required on the final plat by these agencies depending upon the utility service area in which the particular property is located. The appropriate certificates must be included as part of the final plat.

Form 1 -- Certificate of Ownership and Dedication

	hereon and that I (we) hereby add	e are) the owner(s) of the property shown and described opt this plan of subdivision with my (our) free consent, triction lines, and dedicate all streets, alleys, walks, parks rivate use as noted.
	Owner Name:	
	Title:	_ Date:
Form 2	· Certificate of Approval of Street Na	mes
	I hereby certify that the Williamson approved the street name(s).	County Department of Emergency Communications has
	Williamson County Department of Emergency Communications	nte:
Form 3	Certificate of Approval of Subdivisi	on Name
	I hereby certify that the City of Bren name.	twood Planning Department has approved the subdivision
	Secretary, Planning Commission or Planning and Codes Director	nte:
Form 4	· Certificate of Accuracy	
		and described hereon is a true and correct survey to the as of the Brentwood Planning Commission.
	Name:	
	BY:	Date:

Form 5 -- Certificate of Approval of Water and Sewer Systems I hereby certify that the following utility systems outlined or indicated on the final subdivision

	plat entitled regulations.	have been installed in accordance with current applicable
	Water System:	Date:
	Š	Name, Title and Agency of Approving Agent
	Sewer System:	Date:
	Š	Name, Title and Agency of Approving Agent
Form 6	Certificate of Prov	vision of Electrical Service
	I herby certify	that all of the regulations,
	checklists and g	uidelines have been met. Any approval is at all times contingent upon iance with requirements.
		Date:
	Electric Provi	
Form 7	Certificate of App	roval of Streets
	accordance with co	at all streets designated on the final subdivision plat have been constructed in arrent applicable regulations.
		Date:
	Director of Engine	ering Date:
Form 8	Certificate of App	roval for Recording
	subdivision regula	hat the subdivision plat shown hereon has been found to comply with the ations of the City of Brentwood, with the exception of such variances and/or my, as are noted in the minutes of the Planning Commission.
		Date:
	Secretary, Planning Planning and Code	g Commission or

APPENDIX FOUR. BRENTWOOD MUNICIPAL PLANNING COMMISSION -- IRREVOCABLE STANDBY LETTER OF CREDIT STANDARD FORM

Beneficiary:

City of Brentwood Planning Department P.O. Box 788 Brentwood, TN 37024-0788

Applicant:

Name: Address: City, State, Zip

We hereby issue this Irrevocable Standby Letter of Credit in your favor which is available at sight by drafts on (Name of Bank), bearing the clause "Drawn under Irrevocable Standby Letter of Credit Number _____", accompanied by:

Beneficiary's statement signed by one of its officials stating <u>"(Name of the developer)</u> has failed to complete certain improvements and/or has failed to obtain written authorizations for release from all affected agencies for the development project known as <u>(Name of the project)."</u>

Partial drawings shall be permitted.

Draft(s) and documents may be presented at our offices <u>Name</u>, <u>address</u>, <u>telephone number and contact name</u>, <u>of Issuing Bank and Name and address</u>, <u>telephone number and contact name of Local Branch authorized to accept draws</u>, or may be delivered to the above address via registered or certified mail, or by Federal Express or other similar courier service.

This Letter of Credit has been established for <u>(Streets, Drainage, Street Lighting, Water and Sewer, Landscaping improvements)</u> for <u>(Name of Subdivision or Project)."</u> (Insert the name of the appropriate improvement.)

It is a condition of this letter of credit that it shall be deemed to be automatically extended, without amendment for period(s) of one year each from the current expiration date hereof or any future expiration date, unless at least ninety (90) days prior to any expiration date we notify you by registered or certified mail or overnight courier at the above listed address that we elect not to consider this letter of credit renewed for any such period.

Additional information re	quired as r	part of the submittal	of security for red	quired improvements:
---------------------------	-------------	-----------------------	---------------------	----------------------

- (1) The contact name and related information for a representative of the developer.
- (2) The contact name and related information for a representative of the issuing financial institution.

APPENDIX FIVE. BRENTWOOD PLANNING COMMISSION -- PERFORMANCE AGREEMENT

PERFORMANCE SECURITY FOR	(Subdivision or Project Name)
	(Subdivision of Froject Name)
KNOWN ALL MEN BY THESE PRESENTS that $\underline{\ }$	
anda Princ	(Name of Developer or Property Owner) ipal, and Letter of Credit #
benefit of the City of Brentwood Planning Corwithin the hereinafter named subdivision, in	urety, are bound unto the City of Brentwood for the use and mmission, and for the use and benefit of all future lot holders the amount of \$ for payment of which well ssors and assigns jointly and severally by these presents.
The condition of this security is that,	
For approval by the C	a plat/plan known as lity of Brentwood Planning Commission, which approval is a cipal to have such plat recorded in the Registers Office of
until all required improvements and facili including, but not limited to, the construction landscaping, signage, amenity and other misc	commission is unwilling to approve said plat for recordation ities are constructed, installed and completed, especially in of streets, grading, drainage, erosion control, water, sewer, ellaneous items, or until a security is executed and filed with item providing for and securing to the public the actual ments and facilities; and
	nstruction of said streets and improvements and desires to the Resister's Office of Williamson County, Tennessee, so as ansfer of the property in said subdivision; and
and facilities is \$ and the P.	n, installation and completion of the required improvements lanning Commission may, in lieu of the prior construction of nmission is willing to accept such security and approve said 7 Tennessee Code Annotated section 13-4-30.
and complete all of said improvements and f particular shall build, construct and complete landscaping, signage, and other miscellaneous of the City of Brentwood Planning Commis following approval shall then execute and findrainage culverts and facilities, etc., for a periuntil acceptance of said streets, drainage culve of not less than percent (_%) of t Commission and staff from the Engineering	in () months from the date hereof construct, install acilities above mentioned as shown on said final plat and in all streets, grading, drainage, erosion control, water, sewer, items, in proper and workmanlike manner to the satisfaction sion and the Director of Engineering or his designee, and le a proper maintenance security guaranteeing said streets, od of time of not less than () months and continuing erts and facilities, etc. by the City of Brentwood, in the amount he actual construction costs, as required by the Planning Department this obligation shall be void; otherwise it shall Brentwood Planning commission for the purposes set forth e annotated.

IN THE EVENT, the Planning Commission determines that the Principal has failed to meet the conditions and has failed to perform the obligations of this security it may draw a draft or drafts on said Letter of Credit for such amounts as it may determine to be proper.

EXECUTED at the City of Bro	entwood, Tennessee, th	is day of	20	
Witness my hand this the	day of	, 200		
				-
	BY:			
	TITLE:			
STATE OF TENNESSEE)			
COUNTY OF)			
			, a Notary Public of said	
State,satisfactory evidence), and w				
authorized so to do, executed	d the foregoing instrume	ent for the purposes co	ontained therein.	
Witness my hand and	d seal this the day o	of	_, 2008.	
		My Cor	mmission Expires:	

NOTARY PUBLIC



Subdivision Regulations



"Make no little plans. They have no magic to stir men's blood and probably themselves will not be realized. Make big plans; aim high in hope and work, remembering that a noble, logical diagram once recorded will never die, but long after we are gone will be a living thing, asserting itself with ever-growing insistency. Remember that our sons and grandsons are going to do things that would stagger us. Let your watchword be order and your beacon beauty. Think big."

- Daniel Burnham, Chicago architect and urban planner. (1864-1912) -

SUBDIVISION REGULATIONS

City of Columbia, Maury County, TN



Columbia Regional Planning Commission Adopted: _____, 2011

Amendments

No. Date Amendments Sheet(s) Revised

TABLE OF CONTENTS

ARTICLE 1: GENERAL PROVISIONS	1-1
1-1 Title	1-1
1-2 Authority and Legal Status	1-1
1-3 Jurisdiction	1-1
1-4 Policy and Purpose	1-1
1-5 Interpretation, Conflict and Severability	1-2
1-6 Saving Provision	1-2
1-7 Previously Approved Preliminary Plats	1-2
1-8 Amendments	1-3
1-9 Resubdivision of Land	1-3
1-10 Conditions	1-3
1-11 Vacation of Streets, Easements, or Other Public Facilities	1-3
1-12 Variances	1-4
1-13 Enforcement, Violation, and Penalties	1-5
1-14 Repeal of Previous Regulations	1-7
1-15 Fees for Plan Review	1-7
ARTICLE 2: PLAT PREPARATION AND APPROVAL PROCEDURE	2-1
2-1 General Procedure	2-1
2-2 Review Procedure	
2-3 General Conditions	
2-4 Pre-application Meeting	2-2
2-5 Traffic Impact Study	2-3
2-6 Sketch Plat Procedures	2-4
2-7 Preliminary Plat	2-5
2-8 Construction Plans	2-8
2-9 Final Subdivision Plat	2-10
2-10 Signing and Recording of Subdivision Plat	2-12
2-11 Sectioning/Phasing of Major Subdivisions	2-13
2-12 Requirements for Improvements	2-13
2-13 Construction Inspection Procedures	
2-14 Modification of Improvement Design	2-14
2-15 Miscellaneous Platting Situations	2-15
ARTICLE 3: ASSURANCE FOR COMPLETION AND MAINTENANCE O	
	3-1
3-1 Improvements and Performance Bond	
3-2 Inspection of Improvements	
3-3 Release, Reduction or Extension of Performance Bond	
3-4 Maintenance of Improvements	3-4

APPENDIX C: Engineering S	Standards & Details	A-15
APPENDIX B: Subdivision [Development Agreement	A-3
APPENDIX A: Plat Certificat	tes	A-1
ARTICLE 6: DEFINITIONS		6-1
5-7 Requirements Prior to Certifi	icates of Occupancy	5-3
	ance of Building Permits.	
•	(0.11)	
-		
•	uired	
·	d	
·	res for Subdivision Acceptance	
-	S) ACCEPTANCE	
ADTIOLE C. OURRIVIOLON (C) ACCEPTANCE	F 4
-	pace Maintenance	
	sion	
•		
•		
3	s and Related Pedestrian Facilities	
G		
	rs	
	e, Regulatory and Signs	
-	ures, Amenities or Improvements	
·		
-		
•	· · · · · · · · · · · · · · · · · · ·	
_	eation of Lois	
•	eation of Lots	
4-1 General Requirements		4-1
	UIREMENTS FOR IMPROVEMENTS, RESERVATI	
-	·	
	s and Certifications of Occupancy	
3-5 Escrow Deposit for Lot Impro	ovements	3-4

ARTICLE 1: GENERAL PROVISIONS

1-1 Title

These regulations shall hereinafter be known and cited as the Subdivision Regulations of Columbia, Tennessee.

1-2 Authority and Legal Status

These Subdivision Regulations are adopted, and shall be amended, by the Columbia Regional Planning Commission (hereinafter referred to as the "Planning Commission"), in pursuance of the authority and powers granted by Section 13-3-101 through 13-3-413, and Section 13-4-101 through 13-4-310, <u>Tennessee Code Annotated</u> (TCA). Having adopted a major street or road plan for the jurisdictional area, and filed a certified copy with the Maury County Register of Deeds (hereinafter referred to as "County Register") as required by <u>TCA</u> 13-3-402 and 13-4-302, and having held a public hearing as required by <u>TCA</u> 13-3-403 and 13-4-303, the Planning Commission has fulfilled the requirements set forth in state law as prerequisites to the adoption of these regulations.

The following standards guiding the Planning Commission are designed to provide for the harmonious development of the City; to secure a coordinated layout and adequate provision for traffic; and to secure adequate provision for light, air, recreation, transportation, water drainage, sewerage and other facilities.

Compliance Officer. It shall be the duty of the Columbia City Engineer (hereinafter referred to as the "Compliance Officer") or his/her designee to enforce these regulations and to bring to the attention of legal counsel any violations or lack of compliance herewith.

Discrepancy With Other Regulations. No subdivision of land within the force and effect of these regulations shall be approved unless it conforms to the Zoning Ordinance. Whenever there is a discrepancy between minimum standards or dimensions noted herein and those contained in the Zoning Ordinance, building codes, or other regulations, the highest standard shall apply.

Validity. If any section, clause, paragraph, provision or portion of these Subdivision Regulations shall be held invalid or unconstitutional by any court of competent jurisdiction, such holding shall not affect any other section, clause, paragraph, provision or portion of these regulations.

1-3 Jurisdiction

These Subdivision Regulations shall govern all subdivision of land within the jurisdiction of the City of Columbia as defined by the Columbia Planning Commission. No land shall be subdivided within the jurisdictional area until the subdivider submits a plat as required by these regulations, obtains Planning Commission approval of the plat, and files the approved plat with the County Register.

1-4 Policy and Purpose

Land subdivision is the first step in the process of community development. Once land has been divided 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 streets must be maintained and various public services must be provided. The public health, safety and welfare is thereby affected in many important respects; therefore it is in the interest of the public, the developer, and the future owners that subdivisions be conceived, designed and developed in accordance with the ordinances and regulations governing the subdivision of land within the City of Columbia

(hereinafter referred to as the "City"), and the Comprehensive Plan.

1-5 Interpretation, Conflict and Severability

1-5.1 Public Provisions

These regulations are not intended to interfere with, abrogate, or annul any other ordinance, rule, or regulation, statute, or other provision of law. Where any provision of these regulations imposes restrictions different from those imposed by any other ordinance, rule, regulation, or other provision of law, whichever provisions are more restrictive or impose higher standards shall govern.

1-5.2 Private Provisions

These regulations are not intended to abrogate any easement, covenant, or other private agreement or restriction; provided, that where these regulations are more restrictive or impose higher standards than such easement, covenant, or other private agreement or restriction, the requirements of these regulations shall govern.

Where any private provision exceeds the standards set forth herein, such shall be considered a private contract between the parties of interest, and, as such, is beyond the jurisdiction of the Planning Commission.

1-5.3 Severability

If any part or provision of these regulations or application thereof to any person or circumstances is adjudged invalid by any court of competent jurisdiction, such judgment shall be confined in its operation to the part, provision, or application directly involved in the controversy where such judgment shall have been rendered and shall not affect or impair the validity of the remainder of these regulations or the application thereof to other persons or circumstances. The Planning Commission hereby declares that it would have enacted the remainder of these regulations without any such part, provision, or application.

1-6 Saving Provision

These regulations shall not be construed as abating any action now pending under or by virtue of previous Subdivision Regulations, or as discontinuing, abating, modifying, or altering any penalty accruing or about to accrue, or as affecting the liability of any person, or as waiving any right of the governing body under any section or provision existing at the time of adoption of these regulations, or as vacating or annulling any rights obtained by any person by lawful action of the governing body, except as expressly shall be provided otherwise in these regulations.

1-7 Previously Approved Preliminary Plats

1-7.1 Unexpired Preliminary Plats

The approval granted on any preliminary plat prior to the effective date of these regulations shall remain in force and effect for the time period of one year.

1-7.2 Expired Preliminary Plats

If the applicant does not file and record a final plat application within one year, the preliminary plat approval is considered expired and the process must be repeated unless the applicant, through written request, is granted an extension from the Planning Commission. Expired plats are considered null and void; new plans shall be subject to all laws and provisions of these regulations that are in effect at the time such action is considered. In making the determination for extension, the Planning Commission shall

consult the City Engineer on determining if the development is in continual pursuit of construction completion.

1-8 Amendments

1-8.1 Enactment

For the purpose of providing for the public health, safety, and general welfare the Planning Commission may from time to time amend these regulations. Before adoption of any amendment to these regulations, a public hearing thereon shall be held by the Planning Commission, as required by Title 13, Chapters 3 and 4, Tennessee Code Annotated.

1-8.2 Codification and Distribution

Subsequent to adoption of any amendment to these regulations, such amendment shall be incorporated into the text of these regulations in the following manner:

- Replacement pages shall be prepared incorporating the new or changed language. Each such new or replacement page shall have the amendment number and shall be dated so as to indicate the date of last revision of the page.
- 2) Each adopted amendment shall be numbered consecutively and printed on pages separate from any other amendment and in a manner that fully states any language deleted from these regulations and any language added and the place in the text of each such change.

1-9 Resubdivision of Land

1-9.1 Procedures for Resubdivision

If any change in an approved or recorded subdivision plat would affect the layout of any public street, alley, or road (hereinafter referred to as public way) shown on such plat, or area reserved thereon for public use, or any lot line, or if it would affect any map, plan, or plat legally recorded before adoption of any subdivision regulations, such amendment shall be approved by the same procedure, rules, and regulations as for a subdivision.

1-9.2 Subdivision Procedures Where Future Resubdivision Is Foreseen

Whenever a parcel of land is subdivided and the subdivision plat shows one (1) or more lots containing more than double the minimum required area for the zoning district wherein the lot is located, and the City Engineer has reason to believe that any such lot(s) will be resubdivided into smaller building sites, the City Engineer shall require that the subdivision and development of such parcel of land allow for the future opening of public ways and the ultimate extension of adjacent public ways or that such lots be restricted from further subdivision. The City Engineer shall also require that dedications providing for future opening and extension of such public ways be indicated on the plan.

1-10 Conditions

Regulation of the subdivision of land and the attachment of reasonable conditions to land subdivision are exercises of valid police power delegated by the State to the Planning Commission. The developer has the duty of compliance with reasonable conditions imposed by the Planning Commission for design, dedication, improvement, and restrictive use of the land so as to provide for physical and economical development of the jurisdictional area and for the safety and general welfare of future plot owners in the subdivision and of the community at large.

1-11 Vacation of Streets, Easements, or Other Public Facilities

Any plat or any part of any plat may be vacated by the owner of the premises, at any time before sale of any lot described therein, by a written instrument, to which a copy of such

plat shall be attached, declaring the plat or part of the plat to be vacated. In approving the vacation of plats the Planning Commission shall follow the same procedure for approval of plats. The governing body may reject any such instrument that abridges or destroys any public rights in any of its public uses, improvements, or public ways. Such an instrument shall be executed, acknowledged, or approved, and duly recorded or filed; the instrument shall operate to void the recorded plat and divest all public rights in the public ways and public grounds and all dedications described in such plat. When any lot or lots have been sold, the plat may be vacated in the manner herein provided all of the owners of all lots in such platted area join in the execution of such writing.

Any dedicated right-of-way shown on a recorded subdivision plat can be abandoned only through the resubdivision of such plat, or through the resubdivision of the affected section of such plat, according to the procedures of these regulations. Thereby, the Planning Commission must approve the resubdivision of the initially recorded plat that depicts the dedicated right-of-way or future public way access area, in such a manner wherein such dedicated right-of-way is deleted from said plat. Once this revised plat is officially recorded, it acts to supersede the originally recorded plat, and accordingly preserve any existing utility easements, if present. No official action shall be made by the Planning Commission in relation to the abandonment of any dedicated right of-way, pending public notification of adjacent property owners by registered mail as to the time and place of the Planning Commission meeting, at which time such action is to be officially entertained. Any public way access area or dedicated right-of-way that is abandoned as per the procedures cited herein shall be deeded solely to the abutters of such public way access area or dedicated right-of-way.

1-12 Variances

1-12.1 General

If the Planning Commission finds that extraordinary hardships or practical difficulties may result from strict compliance with these regulations, a variance from these regulations may be granted; provided, such variance shall not have the effect of nullifying the general intent and purpose of these regulations and provided, further, that the Planning Commission shall not recommend variations unless it shall make findings based upon written evidence presented to it in each specific case that:

- Granting of the variance will not be detrimental to the public safety, health, or welfare, or be injurious to other property or improvements in the neighborhood where the property is located;
- Conditions upon which the request for a variance is based are unique to the property for which the variance is sought and are not applicable generally to other properties and is not based on financial returns;
- 3) Because of the particular physical surroundings, natural features, or topographical condition of the specific property involved, a particular hardship (not self-imposed) to the owner would result, as distinguished from a mere inconvenience, if the strict letter of these regulations were carried out; and
- 4) The variance will not in any manner alter provisions of the General Plan, Land Use Plan, Transportation Master Plan, or the Zoning Ordinance.

Where the Planning Commission concludes that the purpose of these regulations may be specifically served to an equal or greater extent by an alternative proposal, condition, or circumstance, it may approve other variations to these regulations.

1-12.2 Procedures

In approving any variances from these Regulations, the Planning Commission shall state fully, in the meeting minutes, the grounds for the variance and all of the facts upon which the decision is made.

1-12.3 Conditions

In approving variances, the Planning Commission may impose such conditions as, in its judgment, will secure substantially the objectives, standards, and requirements of the Regulations.

1-13 Enforcement, Violation, and Penalties

1-13.1 General

1-13.101 Recording of Plats

The enforcement of these regulations and the penalties for violations are provided pursuant to Title 13, <u>Tennessee Code Annotated</u> (TCA).

1-13.102 Recording of Plats

Pursuant to Section 13-3-402 and 13-4-302, <u>TCA</u>, no Final Plat of subdivision within the jurisdictional area shall be received or recorded by the county register until such plan has received approval of the Planning Commission in accordance with these regulations, and such approval has been endorsed in writing on the plan by the Planning Commission secretary in the manner prescribed by these regulations.

1-13.103 Use of Unapproved Plats

Pursuant to Section 13-3-410 and 13-4-306, <u>TCA</u> no owner or agent of the owner of any land shall convey such land contrary to the provisions stated herein.

1-13.104 Public Ways and Utilities

Pursuant to Section 13-3-406 and 13-4-307, <u>TCA</u>, the governing body shall not nor shall any public authority accept, lay out, open, improve, grade, pave, or light any public way, lay or authorize the laying of water mains or sewers, or construct or authorize the construction of other facilities or utilities in any public way located within the jurisdictional area unless such way shall have been accepted, opened, or otherwise received the legal status of a public way prior to the attachment of the Planning Commission's jurisdiction, or unless such way corresponds in its location and lines to a way shown on a subdivision plan approved by the Planning Commission or on a public way plan made by the Planning Commission.

The governing body may, however, accept or lay out any other street or adopt any other street location, provided the resolution, ordinance, or other measure for such acceptance, laying out or adoption first shall be submitted to the Planning Commission for its approval and, if disapproved by the Planning Commission, shall receive the favorable vote of a majority of the entire membership of the governing body. A street approved by the Planning Commission upon such submission or accepted, laid out, or adopted by the Planning Commission shall have the status of an approved street location as fully as though it originally had been shown on a subdivision plat approved by the Planning Commission or on a plat made and adopted by the Planning Commission.

In case, however, of any state highway constructed or to be constructed in the jurisdictional area by the State of Tennessee with state funds as a part of the state highway system, the submission to the Planning Commission shall be by the Tennessee Commissioner of Transportation, who shall have the power to overrule the disapproval of the Planning Commission.

1-13.105 Building Permits

No building permit shall be issued for construction of any building or structure located on a lot or plat that is subdivided or sold in violation of any provision of these regulations. Any individual requesting a building permit for a lot located within an established subdivision shall provide evidence that the plat of subdivision wherein such lot is located has been approved and appropriately recorded.

1-13.106 Access to Lots by Public Way or Private Easement

Pursuant to Section 13-3-411 and 13-4-308, <u>TCA</u>, no building permit shall be issued and no building or structure shall be erected on any lot within the jurisdictional area, unless the public way giving access to the lot where on the building or structure is proposed to be placed shall have been accepted or opened or shall have otherwise received the legal status of a public way prior to that time or unless such way corresponds in its location and lines with a way shown on a subdivision plan approved by the Planning Commission, or on a street plan made and adopted by the commission, or unless such lot fronts upon a permanent easement that conforms to all rules, regulations and specifications set forth, herein.

In any instance where a permanent easement is used to provide access to a lot or tract of land having been or being separated by deed or plan from other property, such easement shall be at least 50 feet in width and shall not be used to provide access to more than one lot or tract of land with the exception of flag lots as stated in Section 4-3.2.

Where a permanent easement is proposed to provide access to more than one (1) lot or tract of land, an access way shall be constructed within the easement which will meet or exceed the standards for design and construction of public ways set forth in these regulations, and the Planning Commission shall act to insure that the responsibility for future maintenance of any such access way lying within a permanent easement remains solely with the benefited parties and that in no event shall the maintenance of such access way become a public responsibility.

1-13.2 Penalties for Violations

1-13.201 Recording of Unapproved Plats

No County Register shall receive, file, or record a plat of subdivision within the planning region without approval of the Planning Commission as required in Section 13-3-402 and 13-4-302, TCA, and any county register so doing shall be deemed guilty of a misdemeanor, punishable as provided by law. Any County Register, receiving, filing or recording a plan of a subdivision in violation of Section 2-10 (Signing and Recording of Subdivision Plats), of these regulations, shall be deemed guilty of a violation of the above cited provision of the Tennessee Code Annotated.

1-13.202 Use of Unapproved Plats

Section 13-3-410 and 13-4-306, TCA, 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, 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 County Register, shall be deemed guilty of a misdemeanor punishable as provided by law.

1-13.203 Unlawful Structures

Any building or structure erected or to be erected in violation of these subdivision regulations shall be deemed an unlawful building or structure; and the building official or other official designated by the local government may bring action or enjoin such erection or cause it to be vacated or removed as provided in Section 13-3-411 and 13-4-308, TCA.

1-13.3 Civil Enforcement

Appropriate actions and proceedings may be taken in equity to prevent any violation of these regulations, to prevent unlawful construction, to recover damages; to restrain, correct, or abate a violation, or to prevent illegal occupancy of a building, structure, or premise; these remedies shall be in addition to the penalties described in Section 1-13.2, Penalties for Violations, of these regulations.

1-14 Repeal of Previous Regulations

Upon the adoption and effective date of these regulations, the Subdivision Regulations, of Columbia, Tennessee, adopted June 1, 1989, as amended, are, hereby, repealed.

1-15 Fees for Plan Review

Any individual who is seeking to subdivide property within the jurisdictional area where these regulations are applicable shall pay such filing and review fees as are required. These fees shall be paid prior to the item being placed on an agenda for consideration by the Planning Commission.

End of Section

ARTICLE 2: PLAT PREPARATION AND APPROVAL PROCEDURE

2-1 General Procedure

2-1.1 Plat Approval Requirements

Before any contract is executed for the sale of any parcel of land that is proposed to be subdivided and before any permit for the erection of any structure in a proposed subdivision shall be granted, the subdividing owner or his authorized agent shall apply for and secure the Planning Commission's approval of the proposed subdivision in accordance with the procedures of this article.

2-1.2 Classification of Subdivisions

The Planning Director shall determine utilizing the following definitions whether the application is a partial, minor subdivision or a major subdivision. The applicant shall follow the procedures herein to secure plat approval.

Minor Subdivision

A division of land consisting of not more than two (2) lots and not involving any new or improved public way, the extension of public facilities, or the creation of any public improvements, and not in conflict with any provision of the adopted Comprehensive Plan.

Major Subdivision

All subdivisions not classified as minor subdivisions, including but not limited to subdivisions of three (3) or more lots, or subdivisions of any size requiring any new or improved road, the extension of government facilities, the creation of any public improvements, or in conflict with any provision of the adopted Comprehensive Plan.

2-1.3 Official Submission Date

The date of the meeting of the Planning Commission at which the subdivision plat is heard shall constitute the official submittal date of the plat at which the statutory period required in Section 13-3-404 and 13-4-304 TCA for formal approval or disapproval of the plat shall commence. The applicant is required to meet all submittal deadlines and requirements to be considered complete by the Planning Director. The plat must be on the official Planning Commission agenda as a requirement for the formal hearing, which shall not occur until the Planning Director deems such application to be complete. Plats shall be deferred or disapproved if owner and/or owner's agent is not present at the Planning Commission Meeting.

2-2 Review Procedure

2-2.1 Coordinated Review of Planned Developments

The purpose of this segment is to eliminate unneeded duplication of plans within Planned Unit Developments. The Final Planned Unit Preliminary Plat required in accordance with applicable provisions of the Zoning Ordinance provides sufficient information to meet the needs for Sketch Plat approval. No separate submission of a Sketch Plat shall be required provided all information required for the Sketch Plat is included upon the PUD drawings, Preliminary Plats, Construction Plans and Final Plats.

2-2.3 Summary of Approval Procedure for Minor Subdivisions

A Minor Subdivision shall be accomplished in accordance with the following procedure:

- 1) Pre-Application/Submission Conference
- 2) Filing of Final Plat showing proposal in detail
- 3) Planning Commission Secretary signs Final Plat
- 4) Final Plat is filed in County Register's Office

2-2.4 Summary of Approval Procedure for Major Subdivision

A Major Subdivision may be accomplished in accordance with the following procedure:

- 1) Pre-Application Conference with Planning, Engineer staff and others
- 2) Sketch Plat submission
- 3) Site Inspection with Planning Director and/or City Engineer
- 4) Preliminary Plat submission
- 5) Public Hearing before Planning Commission on Preliminary Plat
- 6) Planning Commission action on Preliminary Plat
- 7) Construction Plans submission and review
- 8) Completion of Improvements (some items may be bonded and completed later)
- 9) Final Plat submission and review/approval
- 10) Planning Commission action on Final Plat
- 11) Planning Commission Secretary signs final plat
- 12) Final Plat is filed in County Register's Office

2-3 General Conditions

2-3.1 Site Alterations

During the subdivision review process no site disturbance shall take place, such as road construction or grading, except that directly related to obtaining any required approvals (e.g., surveying and the location of stakes), that would alter, remove or relocate any existing features including, but not limited to, stone walls, steep slopes, rock outcroppings, trees, general vegetation, streams or water courses.

2-3.2 Concurrent Review by Other Agencies

When approvals by other agencies of government are required such may be achieved concurrently with the review processes required by these regulations.

2-3.3 Transferability

The developer shall not transfer the developer's responsibilities to another developer on which the proposed subdivision is to be located without first providing the City with notice of when the transfer is to occur and who the proposed transferee is, along with appropriate address and telephone numbers and additional information as required by the City Engineer.

2-4 Pre-application Meeting

The purpose of the pre-application meeting is to introduce the applicant to the zoning ordinance and subdivision regulations and procedures and to discuss the location, scope, and nature of the proposed development; to clarify development issues; to determine whether there are any annexation or zoning issues; and to discuss other matters as may be relevant to the development review and approval process. The Developer, along with the Developer's appropriate consultants shall review and clarify planning, engineering, and development criteria with the Planning and Engineering staff. The conference is intended to introduce the Developer and the design team to the City's development process, to identify timeframes for submittal and review, to determine whether the proposed development anticipates annexation, zoning changes or variances, or exceptions from these Regulations.

At the pre-application conference there will be discussion of the City's Transportation Master Plan; the possible need for traffic studies; the City's flood insurance program; the City's Stormwater Management Program; utility availability, capacity and availability of domestic water use, water for required fire protection and sanitary sewer capacity; and the City's policies and expectations for off-site street improvements, drainage improvements, and traffic improvements. During the pre-application conference the Planning Director shall determine whether the proposed development will proceed as a

Standard Subdivision Development in accordance with the provisions of Section 4 of these Regulations or as an Integrated Site Plan/Subdivision Development in accordance with Section 3.5 DEVELOPMENT PLAN REVIEW of the Columbia Zoning Ordinance.

The pre-application conference is intended to identify the coordination of any potential development with existing adopted City plans and recognize any additional or supplemental studies which may be required.

All inquiries for water shall be coordinated with the Columbia Power and Water Systems (CPWS) or county water department. Questions including, but not limited to, the acquisition of offsite easements, location of proposed development within CPWS's service area, as well as determination of loading and capacity of any proposed development must be answered prior to any commitment to serve said development.

All inquiries for sewer shall be coordinated with the City of Columbia Wastewater Department. Questions including, but not limited to, the acquisition of offsite easements, location of proposed development within service area, as well as determination of loading and capacity of any proposed development must be answered prior to any commitment to serve said development.

Following the pre-application conference, but prior to the Master Plan submittal to the Planning Commission, the Master Plan shall be submitted to the City Engineer for review and approval of the preliminary sewer and water layout in accordance with their policies, and procedures and general design criteria. The City Engineer shall coordinate a review of the layout with the Columbia Power & Water Department and the City of Columbia Wastewater Department for sewer layout.

2-5 Traffic Impact Study

A Traffic Impact Study shall be required if the need for such is determined during the preapplication conference and/or Master Plan review. The following circumstances may indicate the need for a traffic impact study:

- 1) Residential development with 75 or more dwelling units or non-residential development with 30,000 square feet of space or more.
- 2) Mixed-use development that generates 75 peak hour vehicle trips or 750 daily vehicle trips.
- 3) The project is located at or near an intersection that currently operates or is believed to operate at a Level of Service C or below.
- 4) The project is located near a location identified by the City Engineer as a high crash/incident location or high concern location.
- 5) A Traffic Impact Study is deemed necessary according to the City Engineer. The City Engineer has the final authority to require a Traffic Impact Study for any specific project.

The Developer shall consult with the City Engineer to finalize the need for a Traffic Impact Study and the scope of any required study. The Traffic Impact Study shall be completed by a registered Engineer and shall be prepared in accordance with generally accepted standards and practices and shall be done at no cost to the City. If a Traffic Impact Study is required, the Developer or authorized agent shall:

1) Schedule and conduct a scoping meeting with the Developer, City Engineer, and Engineer performing the Traffic Impact Study. This meeting will determine the scope

and breadth of the Traffic Impact Study.

- 2) Consult with the City Engineer prior to completing traffic projections and traffic analysis to obtain approval for background assumptions, directional distributions, and internal and pass-by reductions.
- 3) Submit a Draft Traffic Impact Study to the City Engineer. The City Engineer will review and comment on the draft report. A draft of the Traffic Impact Study shall be submitted on or before the submittal date with the number of copies required as determined by the City Engineer. The Traffic Impact Study shall identify, analyze, and discuss mitigation measures. These mitigation measures shall be specific and feasible actions whose implementation will improve the adverse impacts of the proposed development.
- 4) The Final Traffic Impact Study shall be submitted, as required by the City Engineer, and shall be signed and sealed by a registered Engineer in Tennessee prior to submittal of a Preliminary Plat as required by these Subdivision Regulations.

2-6 Sketch Plat Procedures

2-6.1 Application Procedure and Requirements

A request to subdivide land shall be made by the owner of the land, or an authorized representative, by filing an application for approval of a Sketch Plat with the Planning Commission. When an application for a major subdivision includes only a portion of a landowner's entire tract, or when such portion is contiguous to an adjoining tract of the landowner, a layout shall be included showing future potential subdivision of all the contiguous lands belonging to the landowner to ensure that subdivision may be accomplished in accordance with current regulations and with appropriate access.

2-6.2 Sketch Plat Preparation

The failure of the applicant to satisfy the requirements of this section with full and correct information may be used as a basis for disapproval of a Sketch Plat. The Sketch Plat shall be prepared in accordance with but not limited to the following:

- 1) The Sketch Plat shall be made on forms available from the Planning Director and shall be accompanied by a fee as approved by the Planning Commission.
- 2) The Sketch Plat shall include all information described on the Submittal Checklist available from the Planning Director.
- 3) The Sketch Plat shall be prepared by persons licensed to perform the required design services in the State of Tennessee.
- 4) The Sketch Plat shall be presented to the Planning Director by posted deadline, as determined by the Planning Director, prior to a regular meeting of the Planning Commission.

2-6.3 Sketch Plat Content

The Sketch Plat shall include information to include but not be limited the items listed below and accompanied with the Checklist form, which includes the applicant's name, parcel and other information as noted on the checklist.

- Graphic Scale: between 1 inch =10 feet and 1 inch =100 feet, unless otherwise approved
- 2) The size of total property to be subdivided and property boundary
- 3) North arrow

- 4) Vicinity map
- 5) Names of adjoining property owners
- 6) Indicate general public way location and lot patterns
- 7) Explain how plans complies with the Comprehensive Plan and Transportation Master Plan
- 8) Provide proposed phasing, if applicable
- 9) Show existing rights-of-way, easements, structures, railroads, and bridges within or abutting the property
- 10) Show approximate topography of the site at no more than 5 foot intervals, extended into adjacent properties at a minimum of 200 ft
- 11) Natural features on site including but not limited to floodplain, wetlands, streams, ponds, springs, sinkholes, wells, rock outcroppings, slopes 10% and greater, soil types, forested areas and trees over 6" caliper
- 12) Zoning classification of property and adjoining property
- 13) Guarantee letter from local water provider that sufficient water is available and will be provided to all parcels of the proposed subdivision including future phases
- 14) Guarantee letter from local sewer provider that sewer is available and will be provided to all parcels of the proposed subdivision including future phases

2-6.4 Site Inspection

After preparing the Sketch Plat, applicants, at the request of the Planning or Engineering staff shall arrange for a site inspection of the property. At this on-site meeting, which may be publicized in the same manner as all other Planning Commission meetings and workshops, the applicant shall distribute copies of the Sketch Plat. Applicants, their site designers, and the landowner shall attend the site inspection. The purpose of the visit is to familiarize local officials with the property's existing conditions and special features, to identify potential site design including the general layout of designated conservation lands (if applicable), and potential locations for proposed buildings and street alignments. Comments made by City officials or staff and consultants shall be interpreted as being only suggestive. It shall be understood by all parties that no formal recommendations can be offered, and no official decisions can be made, at the Site Inspection, which is essentially an outdoor workshop session.

2-6.5 Effective Period of Sketch Plat Approval

The approval of the Sketch Plat shall expire within one (1) year unless during such time period a Preliminary Plat is filed for all or a portion of the land included within the approved Sketch Plat. A one (1) year extension may be granted if application is made no less than sixty (60) days prior to the expiration date. In the event the Sketch Plat expires, such plat shall become null and void.

2-7 Preliminary Plat

2-7.1 Purpose of Preliminary Plat

Preliminary Plats present detailed engineering information concerning design and ultimate operation of the proposed development. Such plat will reflect results of decisions that have been made in the process of adapting the general concepts contained within the Sketch Plat to actual physical conditions of the site. Prior to approval of construction drawings, and signing of a Development Agreement (Appendix B) no clearing of trees or site grading in any form shall be undertaken.

2-7.2 Application Procedure and Requirements

Following approval of a Sketch Plat an applicant may file with the Planning Commission a Preliminary Plat. Failure of the applicant to provide full and correct information shall be cause for disapproval of such plat. The Preliminary Plat shall contain the information presented in Section 2-7.3 of these regulations, Plat Preparation and Content, and:

- Be presented at the office of the Planning Director by posted deadline as determined by the Planning Director prior to the following scheduled public meeting of the Planning Commission; and
- 2) Include the entire subdivision, or, when phasing is being requested, section thereof, for which approval is sought and all land immediately adjacent, extending five hundred (500) feet there from, or of that directly opposite thereto, extending five hundred (500) feet from the public way frontage of such opposite land. The lot pattern of surrounding development shall be shown within the area located within five hundred (500) feet of the proposed development; and
- 3) Be accompanied by a minimum of twenty-five (25) copies or as stated on the City of Columbia Preliminary Plat application.

2-7.3 Plat Preparation and Content

The Preliminary Plat shall be prepared by individuals who are licensed to perform the required design services in the State of Tennessee.

As a minimum such plat shall contain the following information:

- 1) North Arrow, legend and site vicinity map
- 2) Graphic Scale: between 1 inch =10ft and 1 inch =100ft
- 3) Size of total property to be subdivided and boundary with lengths
- 4) Amounts of pervious/impervious area in acres
- 5) Name of property owners and zoning classification of subject and all adjoining properties
- 6) Contours at vertical intervals of not more than two (2) feet
- 7) 100 yr Floodplain (F-P) and Floodway (F-W) boundaries with elevations and the exact location of the nearest benchmark. Indicate the Flood Insurance Rate Map (FIRM) panel number, its effective date and flood insurance zones
- 8) The location and width of all existing and proposed easements, alleys, and other public ways, and building setback lines
- 9) The location, dimension, square footage of lot and lot numbers of all proposed lots or existing lots; note critical lots on plat
- 10) Natural features on site including but not limited to wetlands, streams, ponds, springs, sinkholes, wells, rock outcroppings, slopes 10% and greater, forested areas and trees over 6" caliper
- 11) The location of all existing buildings and the proposed location of all commercial, mixed-use or condominium buildings within proposed development, if applicable
- 12) The location and dimension of all property proposed to be set aside for park or playground use or other public or private reservation, with designation of the purpose thereof, and conditions, if any, of the dedication or reservation
- 13) Existing and proposed sidewalks, trails and other pedestrian elements.
- 14) Indicate the aquatic buffer zone
- 15) Existing and/or proposed water courses, drainage channels and subsurface drainage structures with proposed method of runoff disposal.
- 16) Subdivision's proposed street names
- 17) Draft proposal of restrictive covenants with maintenance plan for common areas and open space
- 18) Existing and proposed public utility locations, sizes and types including water, fire hydrant, sanitary and storm sewer, culverts, etc.
- 19) Public utility and drainage easement locations and sizes, whether they are to be located within or adjacent to the subdivision
- 20) Proposed storm drainage system with pipe locations and direction of flow noted including areas for detention or retention to address water quality

- 21) Proposed density with summary table of lots, size, sq. ft., and dedications
- 22) Proposed timetable for all phases of development; phases of the subdivision to be clearly marked
- 23) Open Space

2-7.4 Administrative Review

The Planning Director shall initiate an administrative review of the Preliminary Plat and any exhibits submitted in conformance with these regulations. This review shall include the City Engineer and any other appropriate official. The findings of the review shall be presented to the applicant and the Planning Commission.

2-7.5 Planning Commission Review and Action

Following the administrative review of the Preliminary Plat the applicant shall be advised of any recommendation for changes. The Planning Commission shall review the plat and any recommendations made by members of the reviewing staff, to determine conformance of the plan to these regulations, the Zoning Ordinance, and any other relevant regulations of the City. The Commission may specify conditions, changes, modifications or additions that it deems necessary or appropriate, and may make its decision to grant approval subject to such conditions, changes, modifications or additions. Whenever the approval of a Preliminary Plat is subject to conditions, the written action of the Commission shall (1) specify each condition of approval; and (2) request the applicant's written agreement to the conditions within thirty (30) days of receipt of the Commission's written decision. If the applicant's written agreement to the conditions is not received within thirty (30) days of Commission's request for agreement, the Preliminary Plat shall be deemed disapproved. If the Plat is not approved, the Commission's decision shall specify the defects found in the plat, shall describe the requirements that have not been met, and shall cite in each case the provisions of these regulations relied upon.

2-7.6 Certificate of Approval

Upon approval of Construction Plans required by Section 2-8, of these regulations a "Certificate of Preliminary Plat Approval" may be issued by the Secretary of the Planning Commission and the applicant may proceed to apply for Final Plat approval in the manner prescribed by Section 2-9, Final Subdivision Plat, of these regulations. When the Secretary of the Planning Commission has signed the Certificate of Preliminary Plat Approval, one (1) copy of the Preliminary Plat, Construction Plans and Development Agreement (Appendix B) with the date of approval noted thereon shall be returned to the applicant. If a Preliminary Plat is disapproved the Planning Commission shall state specific reasons for disapproval which shall be entered into the minutes of the meeting wherein such action was taken.

2-7.7 Public Improvements

Prior to initiating grading within any major subdivision (or portion thereof) or installation of any public improvements a "Certificate of Preliminary Plat Approval" as required by the section above, shall have been obtained for that portion of the development. With the exception of the final top coat of paving for streets, all public improvements shall be installed and dedicated prior to signing of the final subdivision plat by the Secretary of the Planning Commission.

2-7.8 Effective Period of Approval

- 1) Construction shall commence within eighteen (18) months after approval is granted, or the Preliminary Plat is void.
- 2) A Final Plat Shall be recorded within twenty four (24) months after approval of the Preliminary Plat by Planning Commission, or the Preliminary Plat is void.

- 3) A major subdivision shall not be subject to Preliminary Plat expiration when the following conditions are met:
 - The subdivision has been divided into two or more phases for final approval purposes, in compliance with Subsection 2-11, Sectionalizing of Major Subdivisions, and
 - b. At least one of those phases has a Final Plat recorded with the Register of Deeds and has all public improvements bonded.

2-7.9 Application of Changes within Regulations to Approved Preliminary Plats

Every Preliminary Plat shall conform to all existing zoning provisions and subdivision regulations applicable at the time of approval. If the plat has received approval, it shall be exempt from any subsequent amendments to the zoning provisions and subdivision regulations such that would render the plat non-conforming as to bulk, use, or development standards. The exemption is allowed provided that the approval of the development or affected portion thereof is obtained within the effective period as set forth in Subsection 2-6.5, Effective Period of Sketch Plat Approval.

If the Preliminary Plat approval expires for any reason, re-approval shall be subject to current Zoning Ordinance and Subdivision Regulations in effect at the time re-approval is sought.

2-7.10 Revisions to Approved Preliminary Plats

The applicant shall submit proposed revisions to the approved Preliminary Plats to the Planning Director. The Planning Director shall initiate a review of the proposed revisions. The review is to be performed by the Planning and Engineering Department staff. For all revisions determined to be major revisions, Planning Commission approval shall be required.

Minor Revisions

If the Planning Director, on the advice of the Development Review Committee deems the revision(s) to be minor, he or she is authorized to approve the revision(s) to the Preliminary Plat. Minor revisions are insignificant shifts in street and open space locations, minor changes to lot size, minor changes to unit size and distribution of intensity not inconsistent with a final PUD approval and its associated plan.

Major Revisions

All other revisions, including revisions that are determined by the Planning Director, on the advice of the Development Review Committee, to constitute a public interest, shall be deemed to be major revisions. At the request of the applicant, any revised Preliminary Plat shall be forwarded to the Planning Commission for decision, including reversal of the decision of the Planning Director. The Planning Director may, at his or her discretion or on the advice of the Development Review Committee, direct any revised Preliminary Plat to the Planning Commission.

2-8 Construction Plans

2-8.1 Application Procedure and Requirements

Construction Plans shall conform to the Preliminary Plat previously submitted to and approved by the Planning Commission. Simultaneously with submitting Construction Plans to the City Engineer's office, Construction Plans shall also be submitted to the water utility provider and the Columbia Wastewater Department for review. Construction

Plans shall be accompanied with required fees. Approval of plans by the appropriate utility or jurisdiction must precede actual construction. Construction Plans may be prepared and presented, with the Preliminary Plat or at any point in time following approval of a Preliminary Plat by the Planning Commission.

Construction Plans shall:

- 1) Be presented at the office of the City Engineer;
- 2) Include the entire subdivision, or, when phasing has been approved in the Development Plan, the entire section which shall correspond to the territory incorporated within the Development Plan; and
- 3) Be accompanied by a minimum of five (5) copies of the Construction Plans as described, herein.

2-8.2 Construction Plan Preparation and Content

Construction Plans shall be prepared by persons licensed to perform the required design services in the State of Tennessee

As a minimum, such plans shall contain the following information:

- 1) North Arrow, legend, site vicinity map and cover sheet as required for Preliminary
- 2) Graphic Scale: between 1 inch =10ft and 1 inch =50ft
- Profiles showing existing and proposed elevations along center lines of all public ways
- 4) Where a proposed road intersects an existing public way or ways, the elevation along the center line of the existing public way within the required safe stopping distance per posted speed of the existing public roadway.
- 5) Approximate radii of all curves, lengths of tangents, and central angles on all public ways
- 6) Proposed public ways, as required by the planning commission; where such are required, horizontal stationing shall be at fifty (50) foot intervals and cross-sectional elevations shall be to an accuracy of one tenth foot vertical on a line at right angles to the center line of the public way at the following points: the center line of the public way, each property line, and points twenty-five (25) feet inside each property line
- 7) Plans and profiles indicating the locations and typical cross-section of public way pavements, including curbs and gutters, sidewalks, drainage easements, rights-of-way, manholes, and catch basins.
- 8) The location of public way signs with street names shown
- The location, size, and invert elevations of existing and proposed sanitary sewers, stormwater drains, and fire hydrants, showing connection to any existing or proposed utility system
- 10) Exact location and size of all water, gas, or other underground utilities or structures.
- 11) Location, size, elevation, and other appropriate description of any existing facilities or utilities, including but not limited to, existing public ways, sewers, drains, water mains, easements, water bodies, streams, and other pertinent features, such as swamps, railroads, buildings, and features noted on the land development plan or major street or road plan
- 12) The water elevations of adjoining lakes or streams and the approximate high- and low-water elevations of such lakes or streams shall be shown
- 13) If the subdivision borders a lake, river, or stream, the distance and bearings of a meander line established not less than twenty (25) feet back from the ordinary highwater mark of such waterways.
- 14) The proposed erosion and sediment plan
- 15) Show drainage calculation and stormwater pipe calculations table
- 16) Show detention and water quality calculations.

- 17) Provide roadway plans, profiles and pavement sections.
- 18) Indicate streetlights, proposed trees and landscaping avoid conflicts.
- 19) Natural features on site including but not limited to wetlands, streams, ponds, springs, sinkholes, wells, rock outcroppings, slopes 10% and greater, forested areas and trees over 6" caliper
- 20) 100 yr Floodplain (F-P) and Floodway (F-W) boundaries with elevations and the exact location of the nearest benchmark. Indicate the Flood Insurance Rate Map (FIRM) panel number, its effective date and flood insurance zones
- 21) Existing and proposed sidewalks, trails, bicycle facilities and other pedestrian elements.
- 22) Cut and fill calculations indicating amount of fill proposed to be hauled off site.
- 23) Fire protection system, including main sizes, location of hydrants, boxes, etc.
- 24) Contours at vertical intervals of not more than two (2) feet
- 25) Approved preliminary plan layout showing lot lines, minimum lot sizes, lot numbers, and phasing designating each phase by number or letter, with a heavy line border, at a scale appropriate with the size of the tract. If changes to the preliminary plan are proposed, they must be listed on this sheet
- 26) Indicate group mailbox locations and access
- 27) Open Space

2-8.3 Plan Review and Approval

A plan review meeting shall be conducted for the purpose of assuring a coordinated review of Construction Plans. This meeting shall include the City Engineer, Planning Director and any other appropriate governmental representative(s). The purpose of this meeting is to assure that the Construction Plans are in compliance with the provisions of these regulations, other appropriate laws and sound engineering practice. The City Engineer or his/her representative shall approve or disapprove the Construction Plans. The City Engineer shall notify the Planning Commission in writing of all actions on plans submitted. In any case where revisions may be required for unconditional approval, such revisions shall be made prior to such notice being forwarded to the Planning Commission. In the event the plan is disapproved, the City Engineer shall provide notice thereof to the submitter in writing. Such notice shall include specific provisions of these regulations and/or other provisions with which such plans do not comply.

2-9 Final Subdivision Plat

2-9.1 Application Procedures and Requirements

A subdivider shall prepare a final plat for submission to the Planning Commission in accordance with the latest final plat checklist, which may be obtained from the Engineering Department. Regular meeting dates and times and the deadline for each regular meeting shall be established by the Planning Commission. Provide the Engineering Department hard copies to scale and digital copies in .dwg file format with a projected coordinate system of North American Datum of 1983.

The plat shall be prepared in accordance with the following:

- 1) Include the entire subdivision, or section thereof, for which final approval is sought;
- 2) be a reproducible record plat the size, material, and inking of which shall be as specified by the Register of Deeds. When more than one sheet is required, an index sheet of the same size shall be filed showing the entire subdivision with the sheets numbered in sequence;
- 3) contain such information as described in the Submittal Checklist adopted by the Planning Commission;

- 4) shall be accompanied by a fee as determined by the Planning Department;
- 5) be presented to the Planning Department at least (6) six weeks prior to the regular meeting of the Commission at which the plat is to be considered;
- 6) be accompanied by a performance and/or maintenance bond, if required, in a form satisfactory to legal counsel and in an amount satisfactory to the governing body upon recommendation by the appropriate governmental representative. It shall include provisions that the principal of the bond shall comply with all the terms of the resolution of final subdivision plat approval, as determined by the Planning Commission, including, but without limitations, the performance of all required subdivision and off-site improvements and land included in the irrevocable offers of dedication shall be dedicated to the governing body free and clear of all liens and encumbrances on the premises(s); and
- 7) be accompanied, if the final plat contains open space, recreational facilities, or any portion of the site in common ownership, regardless of the method of ownership, by the following documentation for approval by the Planning Commission and recording with the final plat:
 - a. Plans for improvement and maintenance of the open space or facilities located thereon.
 - b. Articles of incorporation and bylaws of the homeowners' association or other legal entity charged with improving or maintaining the open space or facilities, where open space or facilities are to be deeded to a homeowners' association or similar organization acting on behalf of the joint owners of said property, and declaration of covenants and restrictions pertaining to each and every property within the subdivision.

2-9.2 Incomplete Application

An incomplete application for a Final Plat shall be conclusively deemed to be withdrawn if the Owner does not provide the documents or other information within sixty (60) days after the City has notified the Owner of the missing document or information.

2-9.3 Contents of the Final Plat

The applicant shall file, with the Planning Department, an application for approval of a final subdivision plat. The Final Plat shall be prepared by persons licensed to perform the required design services in the State of Tennessee.

As a minimum such plat shall contain the following information:

- 1) North Arrow, legend and site vicinity map
- 2) Graphic Scale: between 1 inch =10ft and 1 inch =100ft
- 3) Size of property in acres and boundary
- 4) Names and zoning classification of the property owner and all adjoining properties
- 5) Show setback of yard fronting on any street, side yards, and rear yard.
- 6) 100 yr Floodplain (F-P) and Floodway (F-W) boundaries with elevations and the exact location of the nearest benchmark. Indicate the Flood Insurance Rate Map (FIRM) panel number, its effective date and flood insurance zones. If lots adjoin the floodplain or floodway, provide elevation certificates and minimum floor elevations if applicable.
- 7) The exact boundary lines of the tract, determined by a field survey, showing angles to the nearest hundredth. See Title 62, Chapter 18 TCA for the class of survey required.
- 8) The location of all public ways, easements, water bodies, streams, rivers ponds, wetlands, railroads, parks, cemeteries and other features

- 9) the square footages and lot numbers of all proposed lots; note critical lots on plat
- 10) Lot numbers
- 11) Show all streets, easements and right-of-ways and note if they are public or private
- 12) Show street classification of each street within or adjacent to the subdivision
- 13) Show existing structures and buildings, including the exact locations and dimensions of historical structures and sites.
- 14) Show size, type and location of any other surface or subsurface structures existing within or immediately adjacent to the subdivision.
- 15) Public utility and drainage easement locations and sizes
- 16) Show all public utility locations, sizes, types and label name of utility company
- 17) Show locations of fire hydrants
- 18) Show the subdivision name and street names
- 19) Related Final Plat Certificates (See Appendix A.)
- 20) Aquatic Buffer

2-9.4 Hearing and Decision on Final Plat

The Planning Commission shall hold a hearing as required by Section 13-3-404 and 13-4-304 TCA, on each final plat brought before it. The Planning Commission shall, within sixty (60) days after initial consideration of the plat, approve, modify, or disapprove the final plat by resolution, which shall set forth in writing any conditions to which the approval is subject, or reasons for disapproval. The reasons for disapproval shall specifically reference those parts with which the plat does not comply with the ordinances or regulations.

Failure of the Planning Commission to act upon a final subdivision under Section 2-9.4 within 60 days after the official submission date (Section 2-1.3) shall be deemed approval of the plat, and in such event, a certificate of approval, entitling the subdivider to proceed shall be issued by the Secretary of the Planning Commission upon demand by the applicant or the applicant may agree to an extension of time for Planning Commission review. Default approval shall not exempt the subdivision from code compliance.

One copy of the final subdivision plat shall be returned to the subdivider with the date of the approval, conditional approval, or disapproval noted thereon.

2-9.5 Vested Rights

No vested rights shall accrue to any plat by reason of preliminary or final plat approval until the actual signing of the final plat by the Secretary of the Planning Commission and the recording of that plat with the Register of Deeds.

2-10 Signing and Recording of Subdivision Plat

2-10.1 Signing of Plat

- 1) Installation of improvements is required prior to signing of the Final Plat. The Secretary of the Planning Commission shall endorse approval on the Final Plat after all conditions of the resolution of approval have been satisfied and all improvements satisfactorily completed. There shall be written evidence that the required public facilities have been installed in a manner satisfactory to the accepting body as shown on certifications by the appropriate governmental representative(s) and that necessary land dedications and improvements have been accomplished.
- 2) When the conditions of this section are satisfied, the Secretary shall sign a minimum of 5 original copies of the Final Plat.

2-10.2 Recording of Plat

The Planning Director shall file an approved and properly signed Final Plat promptly to the Maury County Register's Office within a maximum time of five (5) working days. The Planning Director shall simultaneously record the agreement of dedication together with

such legal documents as the City Attorney shall require to be recorded. An approved Final Subdivision Plat shall expire if it is not recorded with the Register of Deeds within 30 days after the date of approval by the Planning Commission.

2-10.3 Plat Void if Revised Following Approval

No changes, erasures, modifications, or revisions shall be made on any Final Plat after approval has been given by the Planning Commission and endorsed in writing on the plat, unless said plat is first resubmitted to the Planning Commission and the Commission approves any modifications. In the event that any such Final Plat is recorded without complying with this requirement, the same shall be considered null and void, and the Commission shall institute proceedings to have the plat stricken from the records of the County Register.

2-11 Sectioning/Phasing of Major Subdivisions

When sectioning/phasing is approved within a Preliminary Plat, a Final Plat may be approved in two or more sections. All right-of-way and/or easements for public infrastructure servicing the respective phase must be recorded with the first plat. Where certain improvements are in the opinion of the Planning Commission necessary to facilitate traffic movement, water distribution, sewer collection, stormwater drainage, detention, bioretention, conveyance and any other infrastructure within future sections of a development the Commission may require that such systems be constructed as part of any section of a subdivision. Each phase of a development needs to be "stand alone" in regard to utilities, fire protection, streets and stormwater management. Phase lines must follow reasonable and logical boundaries, such as terminating at intersections or following topographical breaks and shown clearly on plans. Phases shall be constructed in the approved manner to ensure orderly and planned development. Phases shall be planned to ensure the efficient construction of adjacent future phases (those phases immediately next to the subject phase, sharing a common boundary line), and to ensure that phased development is contiguous.

2-12 Requirements for Improvements

2-12.1 Basic Requirements

All improvements, with the exception of the final top coat of asphalt on streets, shall be installed and dedicated prior to the signing of the final plat by the Secretary of the Planning Commission.

2-12.2 Authorization to Construct Improvements

Construction may proceed following approval of a Preliminary Plat by the Planning Commission, approval of Construction Plans by the Engineering Department and the execution of the Development Agreement (Appendix B).

2-12.3 Construction of Improvements

Construction shall be completed to the approved Construction Plans, construction specifications, and construction inspection requirements of the applicable department and agencies. Inspections during the construction process shall meet the requirements of Subsection 2-13, Construction Inspection Procedures. If construction has not started for a subdivision phase within 180 calendar days of the date of approval of Construction Plans, such plans shall be resubmitted (repay fees) to the applicable departments or agencies for reapproval.

2-13 Construction Inspection Procedures

2-13.1 Inspections During Construction

All infrastructure construction is to be completed as described in the approved

Construction Plans, construction specifications, and Development Agreement.

2-13.2 Pre-Construction Conference Required

A pre-construction conference will be held with the City Engineer or appropriate agency/utility prior to the start of construction on each project. At the pre-construction conference, the contractor and owner shall sign documentation acknowledging construction and inspection requirements.

2-13.3 Inspection Schedule

The contractor shall give notification of one business day to the applicable departments or agencies prior to beginning work on each phase of construction. All completed work shall be inspected and approved. Failure to obtain the required inspections and approvals may require work to be removed; certifications and testing by a licensed engineering firm to be provided on any future acceptance by the applicable department or agency.

2-14 Modification of Improvement Design

If at any time before or during the construction of the required improvements it is demonstrated to the satisfaction of the City Engineer that unforeseen conditions make it necessary or preferable to modify the location or design of such required improvements, the City Engineer may authorize modifications, provided these modifications are within the spirit and intent of the Planning Commission's approval and do not extend to the waiver or substantial alteration of the function of any improvements required by the Commission. The City Engineer shall issue any authorization under this section in writing and shall transmit a copy of such authorization to the Planning Commission at their next regular meeting. No change shall be implemented and no construction associated therewith shall be initiated until revised Construction Plans have been submitted to the office of the Engineering Department and approved so as to reflect the proposed change.

2-14.1 Proper Installation of Improvements

If City Officials shall find, upon inspection of improvements that any of the required improvements have not been constructed in accordance with the plans and specifications filed by the subdivider, this information shall be reported to the governing body and Planning Commission. The governing body shall then notify the subdivider and take all necessary steps to preserve the City's rights. No plat shall be approved by the Planning Commission as long as the subdivider is in default on a previously approved plat.

2-14.2 "As Built" Record Drawings Required

The required improvements shall not be considered to be completed until the installation of the improvements has been approved by City Officials and a map satisfactory to the City Engineer or appropriate agency/utility has been submitted, indicating the actual location of all required improvements and monuments marking all underground utilities as actually installed. Subdivider to provide the Engineering Department or appropriate agency/utility with hard copies to scale and digital copies in .dwg file format with a projected coordinate system of North American Datum of 1983.

2-14.3 Completion and Maintenance of Improvements

Permanent streets designated as construction routes within a subdivision shall be maintained for a time period specified in the Development Agreement (Appendix B) submitted in accordance with the offer for street dedication.

2-14.4 Other Streets

Streets other than those designated as construction routes shall be maintained as provided herein. The final paving course shall be applied at the discretion of City Officials. A maintenance agreement shall be developed and held in place until all houses facing such street(s) are constructed or for a time period specified in the Development Agreement submitted in accordance with the offer for street dedication.

2-15 Miscellaneous Platting Situations

2-15.1 Combination of Two or More Lots

Any number of lots may be combined into an equal or lesser number of lots by submittal of a Final Plat, as described in Section 2-9, Final Subdivision Plat. The Final Plat shall show the original lot lines as dash lines and proposed lot lines as solid lines. Combining lots shall require an approval process as set forth herein based on the initial number of lots and manner of conveyance. Any lots resulting from such recombination shall meet all applicable regulations.

2-15.2 Shifting Lot Lines

Shifting of lot lines is subject to the same procedures as described in Section 2-15.1. Shifting of lot lines within a Planned Unit Development shall require submittal of a document showing approval by the Homeowners' Association.

2-15.3 Dedication of Right-of-way, Open Space, Public Use Lands, or Easements

The dedication of land or use of land for public purposes may be accomplished by the following method. A reproducible plat shall be prepared depicting the area to be dedicated by lines and survey description. The location of surrounding property lines, streets and public utilities shall be shown for reference. The placing of monuments and the location of such shall be shown on the plat. Signatory data shall also be included in the same manner as for a final plat. If the dedication is for a street right-of-way that, by the location of the dedication area, would divide a tract into two parcels, the plan shall be created as a final subdivision plat in conformance with Section 2-9.

A written document may be used for dedications in lieu of a reproducible plat. The document shall contain the following minimum information:

- 1) Statement of purpose for the dedication
- 2) A narrative survey description of the area to be dedicated
- 3) Conditions, if imposed
- 4) The document shall contain the same signatory data as required for a final subdivision plat.

End of Section

ARTICLE 3: ASSURANCE FOR COMPLETION AND MAINTENANCE OF IMPROVEMENTS

3-1 Improvements and Performance Bond

3-1.1 Completion of Improvements

Before a final subdivision plat is signed by the Planning Commission Secretary as specified in Article 2-10 of these regulations, all applicants shall complete, in accordance with the Planning Commission's decision and to the satisfaction of the appropriate governmental representative: all public ways, water, sewer, drainage control and other improvements as required in these regulations and approved by the Planning Commission, and shall dedicate such improvements to the governing body free and clear of all liens and encumbrances on the property. The Planning Commission, at its discretion, may waive the requirement that the applicant complete and dedicate all public improvements prior to the signing of the final subdivision plat by providing that the applicant post a bond at the time of submission for final subdivision approval in an amount estimated by the Compliance Officer as sufficient to guarantee to the governing body the satisfactory construction, installation, and dedication of the incomplete portion of required improvements . (See Section 2-7.7)

Performance Bonds shall comply with all statutory requirements and shall be satisfactory to legal counsel as to form, sufficiency, and manner of execution, as set forth in these regulations. The period within which required improvements must be completed shall be specified by the Planning Commission in the motion approving the final subdivision plat and shall be incorporated in the bond and shall not exceed two (2) years from date of final approval.

Such bond shall be approved by the Planning Commission as to amount and conditions. Sixty (60) days prior to the expiration of a bond, if improvements are not complete, the City Engineer may notify the developer and recommend to the Planning Commission to extend the completion date set forth in such bond for a maximum period of one additional year with minimum of ten (10) percent increase or greater if determined by the City Engineer. Performance Bonds shall provide an automatic renewal, referred to as an evergreen clause, in the event the developer is not contacted by the Engineering Department prior to the expiration of the bond.

3-1.2 Performance Bond

For the purpose of these regulations, Performance Bond shall mean two documents: a Performance Agreement and an accompanying Security Document.

The Performance Agreement shall stipulate a completion date for all of the work to be performed and that the applicant agrees to have a registered professional landscape architect, architect and/or engineer, depending on the type of improvements, involved in the construction phase of the project for the purpose of monitoring construction in order to determine conformity with approved plans and specifications of the City of Columbia. The Performance Agreement shall only be entered into by the owner of the property. The bond shall be in the amount of 125 percent of the actual estimated cost as determined by the Compliance Officer and based on the recommendations of city departments. The performance bond shall also secure all lot improvements and private access improvements required pursuant to these regulations, including necessary off-site improvements. Bond information for sanitary sewer installation is contained within the Standard Sewer Specifications for Subdivisions and General System Additions. Please contact the Director of the city of Columbia Wastewater Department.

Types of Bonds. The security document may be in a form as follows and shall express the value in a total amount equaling the sum of all work categories. The beneficiary of the surety shall be the Planning Commission and/or the City.

- 1) Surety Bond or Performance Bond. Issued by an insurance company licensed in the State of Tennessee and located within 75 mile radius of Columbia, Tennessee.
- 2) Irrevocable Letter of Credit. Issued by or confirmed by a financial institution located in Maury County, Tennessee. Any such credit shall bear an expiration date that exceeds the expiration date of the Performance Agreement and contains an automatic renewal referred to as an evergreen clause.
- 3) Cashiers or Certified Check. Issued by a financial institution located in Maury County, Tennessee.

The Surety Bond and Letter of Credit options shall not be available to an applicant whose past performance has resulted in breached or expired bonds. An insurance company whose past performance has resulted in non-payment of a bond may be excluded from providing a surety bond for an applicant for a period of one year from the date of breach. The financial institution shall not issue a surety for more than 10 percent of its total capital to an applicant.

3-1.3 Temporary Improvements

The applicant shall build and pay for all costs of temporary improvements required by the Planning Commission, and shall maintain them for the period specified by the Planning Commission. Prior to construction of any temporary facility or improvement, a separate suitable bond shall be posted which shall ensure that the temporary facilities shall be properly constructed, maintained, and removed.

3-1.4 Costs of Improvements

All required improvements shall be made by the applicant at the applicant's expense. Any provisions for reimbursement by the governing body or any utility agency shall be stipulated in a separate agreement with the applicable City Department or other governmental entity.

3-1.5 Governmental Units

Governmental agencies to which these bonds and contract provisions apply may file, in lieu of said contract or bond, a certified resolution, or ordinance from officers or agencies authorized to act in their behalf agreeing to comply with the provisions of this Article.

3-1.6 Failure to Complete Improvements

In subdivisions for which no performance bond has been posted, if the improvements are not completed within the period specified by the Planning Commission in the motion approving the plat, the approval shall be deemed to have expired. In those cases in which a performance bond has been posted and required improvements have not been installed within the terms of such performance bond, the City Engineer with approval of the City Attorney may then: 1) declare the agreement to be in default and require that all the improvements be installed regardless of the extent of the development at the time the bond is declared to be in default; 2) obtain funds under the security and complete improvements itself or through a third party; 3) exercise any other rights available under the law.

3-1.7 Acceptance of Dedication Offers

Acceptance of formal offers of dedication of streets, public ways, easements, open space, and parks shall be by formal action of the governing body. Such action shall be in

the form of a resolution recommended by the appropriate City Staff or Department to the City Council. The approval by the Planning Commission, whether sketch, preliminary or final plat, shall not be deemed to constitute or imply an acceptance by the governing body of any public way, easement, or other ground shown on the plat. The Planning Commission may require the plat to be endorsed with appropriate notes to this effect. Wastewater improvements are accepted by the City Council upon recommendation of Wastewater Director.

3-2 Inspection of Improvements

3-2.1 General Procedures

If the appropriate governmental representative finds upon inspection that any of the required improvements have not been constructed in accordance with the applicable City Department's construction standards and specifications, the applicant shall be responsible for completing such improvements to the required standards. Whenever the cost of improvements is covered by a performance bond, the applicant and the bonding company or financial institution shall be liable severally and jointly for completing said improvements according to specifications.

3-2.2 Inspection Fees

The costs incurred in connection with a request for extension or reduction of the surety or release of the performance bond and surety (that is, consulting engineering inspection fees, legal fees, and so forth) shall be borne by the subdivider, regardless of whether the request is ultimately granted. No bond shall be released until the City Recorder certifies that all fees have been paid. Inspection fees shall be charged.

3-3 Release, Reduction or Extension of Performance Bond

3-3.1 Certificate of Satisfactory Completion

The Compliance Officer shall not release nor reduce a performance bond until all applicable Departments or Agencies provide written confirmation that all required improvements have been satisfactorily completed and all associated and/or surplus construction materials are removed from the site. There shall be no reduction or release of a bond if there are any outstanding administrative penalties or violations related to the bonded site.

3-3.2 Reduction of Performance Bond

A performance bond may be reduced upon demonstration of satisfactory completion of public improvements, that includes installation of the asphalt surface binder course, and then only to the ratio that the installed improvement bears to the total public improvements for the subdivision. In no event shall a performance bond be reduced below 25 percent or \$5,000, whichever is greater of the original principal amount of the infrastructure within the right-of-ways excluding utility services. No more than two reductions for any one agency shall be considered by the Compliance Officer. The initial bond reduction shall be considered only after the asphalt surface binder is applied to the entire subdivision phase as platted.

3-3.3 Extension of Performance Bonds

The Compliance Officer, upon proof of extenuating circumstances by the applicant and acknowledged and agreed to by the Planning Commission, may extend the completion date set forth in such bond and may require an increase in the bonded amount to cover increases in costs per Section 3-1.1

3-4 Maintenance of Improvements

The applicant shall be required to maintain all improvements including all lot improvements, until acceptance of such public improvements by the appropriate department.

The applicant may be required to file a maintenance bond with the governing body prior to dedication, in an amount considered adequate by the appropriate governmental representative and in a form satisfactory to legal counsel in order to assure the satisfactory condition of the required improvements, including all lot improvements, for a period of one year after the date of acceptances of the public improvements by the appropriate department.

Common areas and facilities within a subdivision, including but not limited to, land, detention and retention ponds, landscaping, entry features, pavilions, structures, private streets and facilities to be conveyed to an association of the owners of the lots within the subdivision shall stipulate maintenance and repair of said land and facilities in the Master Deed(s), or declaration of covenants. The conveyance shall provide mandatory membership of all present and future owners and residents within the subdivision, and shall also provide for a levy against all property within the development for said maintenance and repair. All such conveyance and covenants shall be stipulated. All such conveyance and covenants shall be made a part of the subdivision review process and the content shall be approved by the City Attorney. The Master Deed(s), or declaration of covenants, shall also provide for a sufficient level of funding to offset the reasonable and foreseeable costs of maintenance.

3-5 Escrow Deposit for Lot Improvements

3-5.1 Acceptance of Escrow Funds

Whenever, due to season of the year, any lot improvements required by these regulations cannot be performed, the Compliance Officer nevertheless may issue a Certificate of Occupancy upon accepting a cash escrow deposit in an amount to be determined by the appropriate governmental representative for the cost of such improvements; provided that there otherwise is no danger to the health, safety, or general welfare. The performance bond covering such lot requirements shall remain in full force and effect. Acceptable escrow funds shall be maintained in accounts that are beyond the reach of the developer.

3-5.2 Procedures on Escrow Funds

All escrows shall be held by the City, kept in its bank accounts, and totally under control of the City. A detailed "Escrow Agreement" shall be prepared and appropriately endorsed by all parties to such agreement at the time of creation of any escrow account. The developer's tax identification shall be used for the escrow and the developer shall be responsible for paying tax on any interest credited to the escrow account.

All required improvements for which escrow moneys have been accepted by the Compliance Office at the time of issuance of a certificate of Occupancy shall be installed by the developer within a period of nine (9) months from the date of deposit and issuance of the Certificate of Occupancy. In the event that the improvements have not been installed properly at the end of the time period, the Compliance Officer shall provide written notice of two (2) weeks to the developer requiring installation. In the event they are not installed properly, the developer may request the City to proceed to install or to contract for the installation of the necessary improvements in a sum not to exceed the amount of the escrow deposit.

3-6 Issuance of Building Permits and Certifications of Occupancy

- Where a Performance Bond has been required for a subdivision, or any section of a subdivision, no certificate of occupancy for any building in the subdivisions or section therefore shall be issued prior to the completion and dedication of the improvements to the appropriate governmental unit, as required in the planning commission's final approval of the subdivision plat.
- 2) The extent of public way improvements shall be adequate for vehicular access including emergency vehicles. The developer shall at the time of the dedication submit monies in escrow to the governing body in a sum to be determined by the appropriate governmental representative.
- 3) No building permit shall be issued for the final ten percent (10%) of lots in a subdivision or less than two (2) lots, whichever is greater, until all public improvements required by the Planning Commission's resolution of Final Plat approval have been fully completed, dedicated and accepted by the governing body.

End of Section

ARTICLE 4: GENERAL REQUIREMENTS FOR IMPROVEMENTS, RESERVATIONS AND DESIGN

4-1 General Requirements

4-1.1 Conformance to Applicable Rules and Regulations

In addition to the requirements established herein, divisions of land shall comply with all applicable laws, ordinances, resolutions, rules, policies or regulations, including, but not limited to the following:

- 1) All applicable provisions of Tennessee law, regulations, or policy;
- 2) The Zoning Ordinance, Building and Housing Codes, and all other applicable laws
- 3) The adopted Comprehensive Plan, including its constituent elements, and the adopted Transportation Master Plan;
- 4) The rules of the County Health Department, the Tennessee Department of Health and the Tennessee Department of Environment and Conservation;
- 5) The rules of the Federal Highway Administration or Tennessee Department of Transportation if the subdivision or any lot contained therein abuts or encompasses a federal highway or proposed state route; and
- 6) The standards and regulations adopted by all other boards, commissions, and agencies of the city and county, where applicable.

4-1.2 Self-Imposed Restrictions

If the owner places restrictions on any of the land contained in the subdivision greater than those required by any zoning ordinance or these regulations, such restrictions or reference thereto shall be required to be recorded along with the final subdivision plat.

4-1.3 Monuments

Permanent reference monuments, of non-degradable material as specified in these regulations, shall be placed in all subdivisions where new streets are to be constructed. All monuments shall be placed on property corners or referenced to property lines or street alignments by a licensed surveyor in the state of Tennessee. The plat shall include reference locations and coordinates tied to the Tennessee State Plane Coordinate System. Control Monuments shall have horizontal coordinates and vertical elevations shown on the final plat. Reference notes (field ties) defining magnetic bearings and distances to the nearest established street line or official benchmark shall be accurately described on the plat.

Monuments shall be constructed of concrete not less than thirty (30) inches in length; and not less than 4 inches square or 5 inches in diameter; and marked on top with a cross, brass plug, iron rod, or other durable material securely embedded. Iron Bar Monuments may be used and shall be no less than five-eighths (5/8) inch in diameter and not less than 24 inches in length. Both shall have a permanent metal cap with a minimum diameter of 2 1/2 inches with the Land Surveyor's name and license number.

Monuments shall be located and set as follows:

4-1.301 Control Monuments

Two permanent control monuments, containing both vertical and horizontal data,

shall be located within each subdivision where new streets are to be constructed. All control monuments shall be located within dedicated right-of-way along curve points or lot lines. Control monuments shall be within the line of sight of one another and, if possible, in a non-fill area or be affixed to a natural rock outcrop and shall comply with the following:

- Horizontal coordinates and vertical elevations shall be shown on the final subdivision plat and shall be correlated to the Tennessee State Plane Coordinate System using North American Datum 1983 and North American Vertical Datum 1988.
- 2) Reference notes (field ties) defining magnetic bearings and distances to the nearest established street line or official benchmark shall be accurately described on the final subdivision plat.
- 3) A description shall be included on the final subdivision plat using words and/or symbols to make it easy to locate at the site.
- 4) Azimuth information provided to either a second monument or a substitute such as an antenna, church spire or other natural object of which disturbance is unlikely shall be included on the final subdivision plat.

4-1.302 Internal Monuments and Lot Pins

An internal monument shall be constructed to the same standards as a control monument minus the elevation data. In all subdivisions, lot corners and all lot line breaks shall be staked by iron rods, pipes, or pins at least 24 inches long and five-eighths (5/8) inch in diameter. One monument, for each 4 lots or fraction thereof in the subdivision, shall be placed within sight from one to another.

- The monuments shall be placed within dedicated rights-of-way, when possible, and shall be located in non-fill areas or affixed to natural rock outcrops.
- 2) In all subdivisions, lot corners and lot line breaks shall be staked with nondegradable pins. Placement of iron pins under sidewalks should be avoided.

4-1.303 Along Rivers and Streams

The lines of lots that extend to rivers or streams shall be monumented in the field by iron pins at least eighteen (18) inches long and five-eighths (5/8) inch in diameter or by round or square iron bars at least eighteen (18) inches long. Such pins shall be placed at the point of intersection of the river or stream and lot line, with a meander line established not more than forty (40) feet back from the bank of the river or stream. A control monument meeting the specifications of Section 4-1.4, may be required upon any lot affected by the 100-year floodplain of any river or stream at the discretion of the City Engineer.

4-2 Suitability of the Land for Creation of Lots

4-2.1 Suitability of the Land

Land, which the Planning Director and/or City Engineer finds to be unsuitable for subdivision or development due to flooding as shown on FEMA maps, improper drainage, steep slopes as shown on topographical maps, rock formations, problem soils, sinkholes, other adverse earth formations or topography, utility easements, or other features which may be harmful to the safety, health, and general welfare of inhabitants of the land and surrounding areas shall not be subdivided or developed unless adequate and protective

methods to solve the problems created by the unsuitable land conditions are formulated by the developer and approved by the Planning Commission, upon recommendation of the City Engineer, to solve the problems created by the unsuitable land conditions. Such land shall be set aside for uses as shall not involve any danger to public health, safety, and welfare.

4-2.2 Critical Lots

A lot shall be designated critical when the lot is created on a slope of 20 percent or greater, when it contains floodplain area or on the basis of any other lot feature that affects the feasibility of construction as listed in Subsection 4-2.

As part of the review process, a star symbol shall be used to clearly identify critical lots on the face of the Sketch Plan, Preliminary Plan, and Final Plat. Example star symbol:



4-2.3 Prior to Sketch Plan Approval

Prior to approval of a Sketch Plan for a subdivision that includes lots designated as critical, the applicant shall provide the Engineering Department with a preliminary grading study and a description of the measures to be taken:

- 1) To protect the natural features of the critical lots;
- 2) To minimize changes in grade, cleared area, and volume of cut or fill, and to control adverse impacts on the critical lots during and following the period of site disturbance:
- 3) To align streets to minimize disturbance of slopes; and
- 4) To identify easements along property lines to meet future drainage needs;

4-2.4 Critical Lot Plan Required

Prior to application for a building permit on a lot designated as critical, a plan shall be submitted to the Engineering Department for approval.

4-3 Lot Requirements

4-3.1 Lot Arrangement

The lot arrangement shall be such that there shall be no foreseeable difficulties, for reasons of topography, flood hazards, or other conditions in providing a building site, yard area and access. Lots proposed for creation on steep slopes, or with limited acceptable soil for private sewage disposal system (if applicable), shall be designated on the face of the plat as critical lots in accordance with the provisions of Section 4-2.2.

Where feasible, lot arrangement shall be such that building sites will afford maximum utilization of energy conservation measures, such as providing for solar access purposes.

4-3.2 Lot Dimensions

Lot dimensions shall comply with the minimum standards of the Zoning Ordinance.

Lot Lines. Residential side lot lines shall be at right angles to street lines (or radial to curving street lines) unless a variation from this rule will give a better street or lot plan.

Frontage. Each lot shall have frontage onto a street or onto a common open

space. Lots that front onto a common open space shall have vehicular access from an abutting public or private alley, a shared driveway easement, or a frontage street and shall meet all of the following conditions:

- a) Vehicular access for dwelling units set back no more than 150 feet from a public way.
- b) Alleys shall be approved by the Engineering Department, Public Works and Fire Department.
- c) Alley shall extend from street to street.

Flag Lots. A residential flag lot that abuts a public street with a narrow street frontage (flag lot), may be approved by the Planning Director if the following conditions are met:

- a) No more than one lot in a subdivision of less than eight lots shall be a flag lot. No more than two lots or 10 percent of the total lots in the subdivision, whichever is greater, shall be flag lots in a subdivision of eight or more lots.
- b) A flag lot shall serve only one single-family dwelling and its accessory buildings and the private drive and/or access easement shall connect to a street.
- c) Minimum width for the flagpole portion of the lot shall be 50 feet with a private drive of at least 10 feet wide for its entire length.
- d) Any occupied building on the flag lot must be within 250 feet of a fire hydrant. This distance shall be measured along the street, then along the flagpole portion of the lot, and then in a straight line to the building location. Alternatively, the City Engineer and Fire Marshal may allow a greater distance if the structure has an Approved Automatic Sprinkler System.
- e) The flag lot shared access easement shall be part of one non-frontage lot and under the same ownership as that lot.
- f) Maximum length for the flagpole portion of the lot shall be 250 feet.

Corner Lots. Dimensions of corner lots shall be large enough to allow for street intersection radii and for erection of buildings, as stipulated by the requirements of the Zoning Ordinance.

Additional Yard Area. Residential lots, including double frontage and corner lots, shall be platted so that the depth of any yard abutting an arterial or collector street, limited access highway or railroad can conform to any additional yard requirements established by the zone district requirements.

- a) In residential areas, a buffer strip at least 25 feet in depth adjacent to a railroad right-of-way or limited access highway may be required for minor subdivisions and shall be required for major subdivisions. This strip shall be designated as common open space and shall meet the requirements of Landscape Buffering and Tree Protection in the Columbia Zoning Ordinance.
- b) In commercial or industrial areas, the nearest street extending parallel or approximately parallel to a railroad right-of-way shall be at a sufficient distance there from to ensure suitable depth for commercial or industrial sites.

4-3.3 Building Setback Lines at Electric Power Lines

Subdivider shall meet the local power distributor, Tennessee Valley Authority (TVA) Standard Right-of-Way Widths for transmission lines and National Electric Safety Code clearances. Right-of-ways shall not be blocked in any manner that

would impede ingress and egress In the case of overhead electric power lines where easement widths are not definitely established, a minimum building setback line from the center of the electric power line shall be established as follows:

Voltage of Distribution Line	Building Setback
15 kV and under	20 Feet
46 kV	37 1/2 Feet
69 kV	50 Feet
161 kV	75 Feet

4-3.4 Access from Arterial or Collector Streets

When property is divided along an existing street, the Engineering Department may require that lots not derive access from arterial or collector streets. Where driveway access from arterial or collector streets is necessary, the City Engineer may require that lots be served by combined driveways (usually one driveway entrance shared by two lots), or by a private access drive serving more than two lots (if necessary shared maintenance arrangements shall be incorporated into the subdivision deeds) in order to limit driveway entrances and potential traffic hazards.

4-3.5 Grading and Seeding

No Certificate of Occupancy shall be issued until final grading has been completed and soil stabilization installed in accordance with the approved construction plan. Grading should be the minimum necessary to allow for the efficient construction in accordance with Columbia Zoning Ordinance.

Topsoil shall not be removed from residential lots or used as spoil, but shall be redistributed so as to provide cover on the lots, cover between any sidewalks and curbs, and be stabilized by seeding or planting.

4-3.6 Debris and Waste

No cut trees, timber, debris, earth, rocks, stones, soil, junk, rubbish, or other waste materials of any kind shall be buried in any land or left or deposited on any lot or street at the time of the issuance of a Certificate of Occupancy for any lot. Nor shall any such waste be left nor deposited in any area of the subdivision at the time of expiration of the performance bond and/or at the time of dedication of public improvements.

4-3.7 Fencing

Each subdivider or developer shall be required to furnish and install all fences wherever the Engineering Department determines that a hazardous condition exists. Such fences shall be constructed according to standards established by the Engineering Department, as appropriate, and shall be noted on the final plat as to height and required materials. No Certificate of Occupancy shall be issued for any affected lot until such fence improvements have been installed.

4-3.8 Lot Drainage

Lots shall be arranged in a manner to permit coordination of lot drainage with the general storm drainage system for the area, including subsurface drainage.

- 1) Drainage systems shall be designed to avoid concentration of flow from each lot onto adjacent lots.
- 2) The applicant shall insure that all artesian ground waters of a permanent or temporary nature discovered during the subdivision planning, development and construction process shall be intercepted and carried away to primary drainage

conduits by swale ditches or in underground pipes on property line easements. Regardless of the location of property lines, intercept shall be allowed at the point of artesian surfacing. The applicant shall be obligated to perform this work upon evidence of any artesian water discovered during the planning, development, and construction phase of the subdivision.

3) Any sinkhole or any natural channel serving as a means of moving ground water into the subterranean system shall be identified on the final plat and shall be protected as approved by the Engineering Department and the Tennessee Department of Environment and Conservation (TDEC). All sinkholes in residential subdivisions shall be platted as open space.

4-3.9 Relationship to Watercourses

If a tract being subdivided contains a water body, or portion thereof, lot lines may be so drawn as to distribute the entire ownership of the water body among the adjacent lots.

- 1) The Engineering Department may approve an alternative plan whereby the ownership of and responsibility for safe maintenance of the water body is so placed that it shall not become a public responsibility.
- 2) No more than 10 percent of the minimum area of a lot required under the Zoning Ordinance may be satisfied by land that is under water.
- 3) Where a watercourse separates a buildable area of a lot from the street by which it has access, provisions shall be made for installation of a culvert or other drainage device of a design approved by the Engineering Department and no building permit shall be issued for a structure on such lot until the installation is completed and approved by the Engineering Department.

4-4 Lot Subdivision Connectivity

Each subdivision shall provide at least two different ingress-egress routes for adequate traffic flow and for safety in the case of fire, flood, panic and other emergencies. If the subdivision is unable to have two ingress-egress connections due to limited road frontage or topography, then the City Engineer along with the Planning Commission may approve the subdivision with a single ingress-egress route.

The Planning Director may require a subdivision to achieve a connectivity index of 1.2 or greater. A connectivity index is a ratio of the number of street links (road sections between intersections and cul-de-sacs) divided by the number of street nodes (intersections and cul-de-sac heads). Street links on existing adjacent streets that are not part of the proposed subdivision are not included in the connectivity index calculation. The measure of connectivity is the number of street links divided by the number of nodes. Nodes exist at street intersections as well as cul-de-sac heads. Links are the stretches of road that connect nodes. Stub outs shall also be considered as links.

If a subdivision fails to meet the connectivity index, the Planning Director may determine that this requirement is impractical due to topography, an existing development, and/or natural features. In the event road connections are impractical, a minimum six (6) foot wide pedestrian trail shall be provided to link cul-de-sacs.

4-5 Blocks

4-5.1 Block Widths

Blocks shall have sufficient width to provide for two tiers of lots of appropriate depths. Exceptions to this prescribed block width shall be permitted in blocks adjacent to major streets, railroads, waterways, or for commercial double frontage lots along collector or

arterial streets.

4-5.2 Block Lengths

Block Lengths in residential areas shall not exceed 1,200 feet nor be less than 200 feet or 4 lot widths whichever is greater, except as the Planning Director deems necessary to secure efficient use of land or desired features of the street pattern. Wherever practicable, blocks along arterial and collector streets shall not be less than 1,000 feet in length.

4-5.3 Considerations for Block Length, Width, and Shape

The lengths, widths, and shapes of blocks shall be determined with due regard to: Zoning requirements as to lot sizes; Needs for convenient access, circulation, control, and safety of vehicular and pedestrian traffic; and Limitations and opportunities of topography.

4-5.4 Easements through Blocks

The Planning Director may require the dedication of an easement through blocks to accommodate utilities, drainage facilities, or pedestrian traffic. To accomplish this purpose, the Planning Director may require perpetual unobstructed easements at least twenty (20) feet in width.

4-6 Improvements

4-6.1 Authorization to Construct Improvements

The approval of the Sketch Plan and the Preliminary Plat plan by the Planning Commission and the approval by the applicable departments or agencies of construction plans shall be authorization to proceed with construction of improvements within a subdivision.

4-6.2 Construction of Improvements

Construction shall be completed to the approved construction plans, construction specifications, and construction inspection requirements of the applicable department and agencies. Inspections during the construction process shall meet the requirements of Section 2-8. If construction has not started within 180 calendar days of the approval date of the construction plans, the City Engineer may require construction plans to be resubmitted (fees repaid) to the applicable departments or agencies for re-approval. The State approves sewer plans on a 1 year basis. The developer has to request an extension from the State if construction has not started within that year.

4-6.3 Completion of Improvements

After all required inspections are completed, the final paving course may be applied when 75 percent, of the structures are completed within a subdivision. Under no circumstances shall final paving occur until all utility installations, including service lines to lots are complete. However, when an undue hardship is created by disallowing the final paving of a street prior to construction of 75 percent build-out, the Columbia Engineering Department may permit final paving to occur and the Planning Commission may allow the subsequent reduction of the Performance Bond as described in Article 3: Assurance for Completion and Maintenance of Improvements. Once 90 percent of all structures within a subdivision are completed, no further building permits shall be issued until all infrastructure has been completed and accepted by the applicable departments and agencies.

4-7 Public Ways

4-7.1 General Requirements

All plans for street improvements require the approval of the Columbia Engineering

Department.

4-7.2 Street Design Standards

Sight Distance. Sight distance along streets and at intersections shall be not less than the minimum horizontal and vertical distances as specified in the AASHTO Design Guide Manual, current edition, for the class of street under consideration.

Grades and Cross-slopes. Maximum grades shall be approved by the Columbia Engineering Department and current standards.

Vertical Design. Vertical design shall be in accordance with the current edition of the AASHTO Manual. The vertical design speed of a street shall be equal to or greater than the horizontal design speed of that street. The applicant shall show on the plans the parabolic curve ("K" value) and the design speed of each vertical curve, and the design speed of each horizontal curve.

Right-of-Way and Pavement Width. Minimum right-of-way width and pavement width shall meet the Engineering Department's standard details or as approved by the City Engineer. Whenever possible, four moving lanes should be avoided in residential areas except for required arterial or collector streets. Four lanes may be warranted for short distances at entrances to larger developments. One-way streets may be permitted and, in some cases, may be desirable for loop streets or where there is a need to separate the directional lanes to preserve natural features or to avoid excessive grading for street construction on slopes.

Non-Curb Street Design Permitted. A non-curb street design cross section in accordance with Engineering Department's standard details and specification may be permitted along low volume roads in a Conservation Subdivision or Low Impact Development.

Horizontal Radius of Curved Streets. The minimum centerline radius of curved segments shall be in accordance with the AASHTO Manual, current edition. Generally, subdivision streets shall not be superelevated.

Pavement Standard. Public and private streets shall be designed in accordance with the standards as set forth by the Columbia Engineering Department

Exposed Utility Casting. Prior to final paving, a manhole, valve box frame and cover, or other utility casting that is exposed to traffic and requires adjustment to an elevation one inch or more above the existing pavement shall have a temporary asphalt ramp constructed uniformly around the casting. A taper slope of not less than two feet per one inch shall be used. During the final paving operation, the temporary ramp shall be removed from the casting to allow for the permanent paving installation.

Tangents between Reverse Curves. The minimum length of tangents between reverse curves for non-superelevated streets shall be in accordance with the Engineering Department's Standard details and specification.

Turnarounds. The type of turnaround required shall be determined by the Engineering Department. Turnarounds shall be designed to accommodate emergency and service vehicles as well as passenger cars. Exceptions to the turnaround requirements may be made for short streets, up to 50 feet long, where emergency and service vehicles are able to back out with relative ease. The maximum lengths of streets with turnarounds shall be 650 feet. All circular turnarounds of 150 feet or greater radius on permanent dead-end streets shall have a central planting island. The design of turnarounds shall be approved by the Engineering Department.

Intersection Design Standards for Minor Local, Local, and Collector Streets. Intersecting streets shall meet at a 90-degree angle wherever possible. Where natural or manmade obstacles prevent a standard intersection, intersecting streets may have a centerline angle of not less than seventy-five (75) degrees. The centerline-to-centerline distance between offset T-type intersections shall be at least 200 feet along local streets and 300 feet when such T-type intersections occur along a collector street. The minimum radius of corner lines (returns) connecting lines of intersecting streets shall be approved by the Engineering Department. Where a street approach to an intersection is curved, there shall be a 100-foot minimum curve tangent as measured from the ultimate edge of pavement. For the purposes of this requirement, the ultimate edge of pavement is that point to which the pavement will extend when the street is built to its full dimension conforming to the standards for its assigned classification on the Transportation Master Plan and Collector Plan. At street intersections, a vertical slope not greater than 3 percent for 50 feet or greater shall be provided on all stopped streets except on minor local streets an approach slope of 35 feet or greater at a maximum 4 percent grade may be permitted as measured from the ultimate edge of pavement as defined by the Transportation Master Plan.

Number of Intersecting Streets. Not more than two streets shall intersect in any one location unless otherwise specifically approved by the City Engineer.

Design Speeds. For safety purposes, on low volume residential streets, the designer shall use design features that tend to reduce speed, including narrower widths, shorter streets, curves and on street parking.

Gated Subdivisions. Guardhouses and gate structures shall be approved by the City Engineer and shall include a typical system, acceptable to the City Fire Department, for immediate emergency access to the subdivision. At a minimum, gated subdivisions shall meet the following requirements:

- 1) All gates shall be located a minimum of 30 feet from the public right-of-way and shall not open outward but shall open with the flow of traffic;
- 2) At least 13 feet 6 inches vertical clearance shall be provided and maintained over the full width of all means of access; and
- 3) The clear opening provided through gates shall be 2 feet wider than the traveled way.

The Columbia Fire Marshal and the City Engineer may impose additional requirements for gated subdivisions as may be necessary to carry out the intent of these subdivision regulations. Under no circumstances shall the City or emergency service providers be responsible for the repair of any damage to the gates or structures associated with an emergency response into the subdivision.

4-7.3 Reserve Strips

The creation of reserve strips adjacent to a proposed public way in such a manner as to deny access from adjacent property to such public way may be required by the Planning Director to enable a more appropriate pattern of lots or public ways. A notation to this effect shall be entered on the final plat or approved as an auxiliary instrument attached thereto.

4-7.4 Additional Regulations for Private Street

Private streets may be included in any subdivision in conformity to these standards so long as the subdivision is included within a Conservation Subdivision or Traditional Neighborhood Design as defined in Article 6 of these subdivision regulations. The private street (or road) shall be identified on the face of the plat as an easement for lot access and as a public utility easement.

Private streets shall conform to the provisions of Section 4-7 of these regulations and in addition the following:

- 1) All vehicular access to the private street shall be shown on the development plan and final subdivision plat.
- 2) The Master Deed(s), or declaration of covenants shall contain, in its description of the common element(s), a specific designation of the private street as the responsibility of an Owner's Association and not of the City of Columbia. The Master Deed(s), or declaration of covenants, shall also provide for a sufficient level of funding to offset the reasonable and foreseeable costs of maintaining the private street(s).

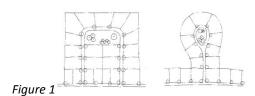
4-7.5 Street Construction and Related Requirements

Grading and Improvement Plan. Street plans shall conform to the standards required by this Section and shall be approved as to design and specification by the Engineering Department.

Improvements in Floodable Areas. The finished elevation of proposed streets shall be a minimum of one foot above the 100-year flood elevation. Location of such streets shall conform to the requirements of the Stormwater Management Regulations as administered by the Engineering Department.

Arrangement of Streets:

- 1) All streets shall be properly integrated with the existing and proposed system of streets and dedicated rights-of-way as established in the Comprehensive Plan and Transportation Master Plan.
- 2) All streets shall be properly related to special traffic generators, such as industries, business districts, schools, churches, and shopping centers; to population densities; and to the pattern of existing and proposed land uses.
- 3) Minor local streets shall be laid out to conform as much as possible to the topography, to provide for the efficient dispersal of internal traffic while discouraging high volumes of through traffic, and to permit efficient drainage and accommodate utility systems.
- 4) The use of an interconnected street system shall be used to broadly disperse internal traffic and provide maximum alternatives for access to property for both public and private movement.
- 5) The use of curvilinear streets shall be encouraged where conformance with existing topography shall minimize the volume of cut and fill.
- 6) Street designs such as loop streets shown in Figure 1, are preferred to the use of a cul-de-sac design. Cul-de-sacs shall be permitted where topographic features or configuration of property boundaries prevent street connections. These alternatives shall support the turning movements of emergency and service vehicles.



- 7) Proposed streets shall be extended to the boundary lines of the tract to be subdivided, unless prevented by topography or other physical conditions, then the extension is not desirable for the coordination of the layout of the subdivision with the layout, either in existence or proposed, of adjacent tracts. Where streets are extended to property lines, temporary turnarounds shall be installed, unless the street segment is less than 150 feet in length. In all cases, drainage and utility easements shall be extended to property boundaries.
- 8) In business and industrial developments, the streets and other access routes shall be planned in connection with the grouping of buildings, location of rail facilities, and the provision of alleys, truck loading, and maneuvering areas, and location of walks and parking areas to minimize conflict of movement between the various types of traffic, including pedestrian traffic.

Dead-end Streets.

- 1) Dead-end Streets (Temporary). The arrangement of streets shall provide for the continuation of streets between adjacent properties for convenient movement of traffic, effective fire protection, and/or efficient provision of utilities. If the adjacent property is undeveloped and the street must be a dead-end street temporarily, the right-of-way shall be extended to the property line. A temporary turnaround, approved by the Engineering Department, shall be provided on all temporary dead-end streets exceeding 150 feet in length, with a notation on the subdivision plat that land outside the normal street right-of-way shall revert to abutting property owners whenever the street is continued. The reconstruction of the temporary turnaround into the normal right-of-way shall be the responsibility of the attaching developer. Temporary turnarounds shall have a minimum slope of one percent as measured from the center. Additionally, a sign shall be placed, in accordance with the requirements of Section 4-9, at the terminus of the temporary cul-de-sac that reads as follows: "Temporary Dead-End Street, to be extended by the authority of the City of Columbia, Tennessee."
- 2) Dead-end Streets (Permanent). Where a road does not extend beyond the boundary of the subdivision and continuation is not required by the Planning Commission for access to adjoining property, the terminus shall normally not be nearer to such boundary than 20 feet. However, the City Engineer may require the dedication of an easement extending to the property line to accommodate drainage facilities, pedestrian traffic, or utilities. A turn-around shall be provided at the end of a permanent dead-end street in accordance with these regulations. For greater convenience to traffic and more effective police and fire protection, permanent dead-end streets shall be limited in length in accordance with these regulations.

Alleys. Alleys may be required where appropriate in all commercial and industrial districts. Alleys are appropriate in residential districts to improve lot access, reduce the number and frequency of driveways entering public or private streets, or reduce the need for topographic disturbance.

Bridges. Bridges must meet the latest version of the TDOT Standard Specifications for Road and Bridge Construction. All bridges, including bridges required as part of a driveway serving a single residential home, shall meet necessary construction standards to provide access for emergency vehicles. Bridges of primary benefit to the subdivider, as determined by the Planning Commission, shall be constructed at the full expense of the subdivider without reimbursement from the governing body. The sharing of expenses for the construction of bridges not of primary benefit to the subdivider, as determined by

the Planning Commission, shall be fixed by special agreement between the governing body and the subdivider

Construction Standards. The construction plans of all streets shall be approved by the Engineering Department.

4-8 Preservation of Natural Features, Amenities or Improvements

4-8.1 Application

Where a proposed subdivision adjoins or encompasses either a Greenway Corridor shown on any Countywide Greenways Plan and/or Countywide Parks Master Plan, a substandard street, or a route depicted upon the Transportation Master Plan to be opened, widened, or realigned, or generates a need for increased recreational opportunities, then requirements of Section 4-8 shall apply.

4-8.2 Undeveloped Property

Infill Development on Non-Standard Street(s). Infill development, located on streets within the urban district that is predominantly developed, provide access to primarily residential uses, and are established with a non-standard right-of-way and/or pavement width, generally shall not be required to provide right-of-way or pavement width in excess of the existing street dimensions.

Planned Routing. The layout of a street(s) within a subdivision shall conform to the routing depicted upon the Transportation Master Plan. The amount of right-of-way for the type of street required shall be dedicated up to a maximum of 60 feet in width. Where any street so depicted requires a right-of-way greater than 60 feet then the developer shall show on the face of the plat an additional area "reserved for future right-of-way" and any required yard area shall be measured from the reservation line.

4-8.3 Developed Property

When property containing existing structures is being divided simply to place each structure on a separate lot and the future right-of-way will fall within the existing structure footprint, then the applicant shall be required to note on the face of the plat any additional area necessary for compliance with the Transportation Master Plan" reserved for future right-of-way." The plat shall also contain a note stating, "When any existing structure is demolished, the setback requirements for any new structure shall be measured from the reservation line."

4-8.4 Required Improvements or Dedications

In addition to the above requirements, a traffic impact study shall be required in accordance with Article 2-5 "Traffic Impact Study." Any required on- or off-site street improvements shall be made by the developer upon property that the developer controls and/or upon public property.

Existing features which would add value to residential development or to the area as a whole, such as trees, watercourses and falls, historic spots, and similar irreplaceable assets, shall be preserved in the design of the subdivision, as required by the Planning Commission. No change of grade of the land shall be effected nor shall any natural features be removed or relocated until a preliminary subdivision plat has been approved by the Planning Commission.

4-8.5 Relationship to Scenic Routes

A subdivision fronting or encompassing a street designated on the Transportation Master

Plan as a scenic road shall be platted in accordance these Subdivision Regulations and with the following:

- 1) Right-of-way shall be platted as noted in Article 4 except for the lot area located within 75 feet of the centerline of the existing right-of-way shall be designated on the face of the plat as a "Scenic Easement."
- 2) A building setback line shall be located on the face of the plat. The line shall be established by measuring the applicable zone district required yard from the scenic landscape easement line.
- 3) A note shall be placed on the face of the plat that states, "except as authorized by the approved construction plans, no grading, cutting of trees, or disturbance of natural features shall be performed within this easement except driveway crossings which shall be located to provide minimal disturbance." The note shall be referenced by arrow or number to the scenic easement location.

4-8.6 Conservation Easements

Publicly accessible conservation easements shall be required in subdivisions along blue line streams and/or contiguous to greenways as indicated in the Comprehensive Plan, City Greenway Plan or other community parks and recreation plans. In areas where the primary function of the greenway is as an urban or neighborhood transportation connector and the waterway is not a regulated floodway, the greenway conservation easement shall include the streambed plus a corridor at least 35 feet in width, measured from top of bank, outward. In areas where the greenway is intended to protect the natural environment of and public access to the major waterways in Maury County, and serve the multifunctional roles of recreation, transportation, and habitat protection, the greenway conservation easement shall include the floodway plus a corridor at least 75 feet in width, measured from the outer edge of the floodway. In cases where the maximum cross-slope of the land included in the easement is greater than 15 percent, the greenway conservation easement width shall be extended to include an area at least 25 feet in width where a cross-slope of 15 percent or less exists, to enable an ADA accessible trail, acceptable to the City Engineer, to be constructed.

Lots along the edge of the greenway conservation easement shall have signs indicating the presence of a future public greenway located every 200 feet minimum along the property prior to issuance of the first building permit. Signs shall be posted with the text facing inward on the building lot(s). The developer shall be responsible for the installation and maintenance of all signs until all lots within the subdivision have been sold to the ultimate home purchaser. Paths, when constructed, shall be built to meet the specifications of the City of Columbia Engineering Department.

4-9 Subdivision and Street Name, Regulatory and Signs

For all Subdivision and all public and private street names the proposed name of the subdivision or streets within the subdivision shall not duplicate or too closely approximate phonetically, the name of any other subdivision or street in Maury County.

4-9.1 Signage Requirements

All signage shall conform to the requirements of the Engineering Department's standards. Temporary signs may be installed and maintained in lieu of permanent signs until curbs are installed and backfilled. Such signs shall meet the same standards for mounting height, size, and legibility as permanent signs but may be mounted on temporary structures. The installation of temporary street name signs, including the signs required for temporary dead-end streets and for greenway easement signs in accordance with these standards, shall be verified by written developer/contractor certification to the Engineering Department before authorization for building permits may be granted.

4-9.2 Street Name Signs

Installation Requirements. The developer shall purchase and install appropriate signs. Written confirmation of this placement shall be required from the Engineering Department prior to the recording of a final plat.

Bond. The developer may post a performance bond in lieu of the improvements prior to the recording of the final plat. Street sign bonds shall be a part of the original bond covering streets, drainage, water, sewer, etc.

Notes. All subdivision plats that require street name signs, temporary dead-end street signs as described in Section 4-9, and/or greenway easement signs as described in Section 4-8.6 shall require a note stating: "No building permit may be issued on any lot until street name signs, temporary dead-end street signs, or greenway easement signs are installed and verified by the Engineering Department on all streets on which the lot depends for access."

Planned Unit Developments. Within Planned Unit Developments that require street name signs, but do not require the recording of a final plat, the signing requirements shall be specified in the conditions of approval.

4-9.3 Regulatory and Warning Signs

Installation Requirements. The developer shall purchase and install appropriate signs. Written confirmation of this placement shall be required from the Engineering Department prior to the recording of a final plat. No special note regarding warning signs shall be required on the subdivision plat.

Bond. The developer may post a performance bond in lieu of the improvements prior to the recording of the final plat. Street sign bonds shall be a part of the original bond covering streets, drainage, water, sewer, etc.

4-9.4 Street Names, Regulatory and Warning Signs for Private Streets

Installation Requirements. The developer shall purchase and install signs as approved by the Engineering Department. Written confirmation of this placement shall be required by developer or contractor prior to the recording of a final plat.

Notes. All subdivision plats that require street name signs, temporary dead-end street signs as described in Section 4-7.5 and/or greenway easement signs as described in Section 4-8.6 shall require a note stating: "No building permit may be issued on any lot until street name signs, temporary dead-end street signs, or greenway easement signs are installed and verified by developer/contractor on all streets on which the lot depends for access."

Planned Unit Development. In the case of developments that require the recording of a final plat, the requirements shall be specified in the conditions of Planned Unit Development approval.

4-10 Drainage and Storm Sewers

4-10.1 General Requirements

In addition to the following regulations, the City of Columbia Stormwater Ordinance, shall be strictly enforced.

4-10.2 Storm Water Facilities

Drainage facilities shall be located in the road right-of-way, where feasible, or in perpetual unobstructed easements.

Culvert or Bridges Headwall style shall be as approved by the city of Columbia Engineering Department. Concrete headwalls shall be constructed at both ends of cross drains or driveway culverts and approved by the Columbia Engineering Department. Masonry veneer headwalls shall be permitted upon review. Bridges and box culverts shall be constructed to the same width as the roadway where such is to be placed plus five feet on either side of the roadway to accommodate sidewalks.

Accommodation of Upstream Drainage Areas. A culvert or other drainage facility shall in each case be large enough to accommodate potential run-off from its entire upstream drainage area, whether inside or outside the subdivision. The applicant's licensed engineer shall determine the necessary size of the facility. The developer shall be responsible for upsizing cross-drains under existing streets due to relocation of existing drainage channels or increased run-off resulting from the subdivision.

Effect on Downstream Drainage Areas. The effect of each subdivision on existing downstream drainage facilities outside the area of the subdivision shall be determined. Where it is anticipated that the additional run-off incident to the development of the subdivision will overload existing downstream drainage facilities provisions shall be made for improvement of such drainage facilities or inclusion of detention or retention facilities within the proposed development as determined by the Engineering Department.

4-10.3 Dedication of Drainage Easements

Where a subdivision is traversed by a drainage way, channel, or stream either natural or manmade, there shall be provided a storm water easement or drainage right-of-way conforming substantially to the lines of such watercourse and of such width and construction as shall be adequate for the purpose. Consideration shall also be given to incorporation of sewer easements parallel to or overlaying drainage easements as both generally follow the same course.

Where topography or other conditions are such as to make impractical the inclusion of drainage facilities within a road right-of-way, perpetual unobstructed easements at least 20 feet in width for such facilities shall be provided across property outside the road right-of-way but within satisfactory access from a road. Easements shall be indicated on the plans as required in Article 2 of these regulations. Drainage easements shall be carried from roads to natural watercourses or to other drainage facilities. When a new drainage system is to be constructed which will transport water across adjacent private land outside the subdivision, appropriate drainage easement(s) shall be secured and indicated on the plat by notes referencing the easement recording. The applicant shall dedicate, when required by the Planning Commission either in fee or by drainage or conservation easement, the land on both sides of existing watercourses to a distance to be determined by the Engineering Department, but not less than 10 feet each side.

4-10.4 Floodplain Areas

The Planning Commission may, when it deems it necessary for the health, safety or welfare of the present and/or future population of the area or necessary to the conservation of water, drainage, and sanitary facilities, prohibit the subdivision of any portion of the property which lies within the floodplain of any stream or drainage course. The regulatory floodway shall be preserved from any and all destruction or damage resulting from clearing, grading, or dumping of earth, waste material or stumps.

No subdivision or part thereof shall be approved by the Planning Commission if proposed subdivision levees, fills, structures, or other features will individually or collectively, increase flood flows, heights, duration or damages. In approving plans for subdivision of land containing flood-prone areas, the Planning Commission shall ensure that

development will proceed in such a way that property lying within any floodway will be maintained in a manner prescribed by the Zoning Ordinance.

4-11 Water Facilities

4-11.1 General Requirements

- Necessary action shall be taken by the developer to extend a water supply system capable of providing domestic water use and fire protection. The agency providing the water shall submit a letter to the City Engineer verifying that they can and will furnish adequate potable water service.
- Where a public water main is within reasonable access of the subdivision, as determined by the Columbia Power and Water Systems, the applicant shall install adequate water facilities, including fire hydrants, subject to the rules and regulations of the Columbia Power and Water Systems, the Tennessee Department of Public Health, adopted Fire Code, and these regulations.
- 3) The location of fire hydrants shall be as specified in applicable ordinances and code. Fire flow requirements shall be as specified by the Fire Marshal. The applicant shall determine the availability of sufficient fire fighting water prior to submittal of the development plan. Plans shall be approved by the State Department of Environment and Conservation Permits, Columbia Power and Water Systems, the appropriate local utility agent, and Columbia Fire Marshal, where applicable.
- 4) All water systems, whether public or private, located in a flood-prone area shall be flood-proofed to the regulatory flood protection elevation. All water supply facilities located below the regulatory flood protection elevation shall be designed to prevent the infiltration of floodwaters into the water supply system and discharge from the system into floodwater.
- 5) New water mains in subdivisions shall be located in the road right-of-way or in a ten foot utility easement behind the sidewalk. Two-inch conduits will be installed on all long water service lines prior to paving streets.
- 6) A preconstruction meeting will be required on any type of water facilities construction. The developer will be required to pay any applicable design, inspection and tap fees to Columbia Power and Water Systems related to water service.

4-11.3 Fire Hydrants

Fire hydrants shall be required in all subdivisions. Hydrants shall be located no more than five hundred (500) feet apart by road and be within five hundred (500) feet of all residential, commercial, or industrial building envelopes or structures, whichever is applicable. The location of fire hydrants shall be approved by the City of Columbia's Fire Marshal and Columbia Power and Water Systems, who may require variations from these requirements, including closer spacing of hydrants where physical conditions or types of structures so warrant. City of Columbia's Fire Marshall may consider increased spacing of fire hydrants in a proposed subdivision if proposed structures are fire sprinkled as set forth by the City of Columbia's adopted Fire Code. In general, the fire hydrants will be located in the landscaping area between the curb and the sidewalk.

To eliminate future public way cutting or openings, all underground utilities for fire hydrants, together with the fire hydrants themselves, and all other water supply improvements shall be installed before any final paving of a public way.

4-12 Sewerage Facilities

4-12.1 General Requirements

The applicant shall install sanitary sewer facilities in a manner prescribed by the regulations of the Tennessee Department of Environment and Conservation (TDEC) and by any other applicable standards and specifications. All plans shall be designed and approved in accordance with the rules, regulations, specifications, and standards of the City of Columbia Wastewater Department and any applicable governmental agency or appropriate unit thereof. No subdivision shall be approved until provisions are made for the adequate disposal of wastewater.

4-12.2 Mandatory Connection to Public Sewer System

- 1) When public sanitary sewers are accessible to the subdivision, as determined by the Columbia Wastewater Director, the subdivider shall provide such facilities to each lot therein and shall connect the facilities to the public system. The subdivider shall provide sewers that meet standards set forth by the City of Columbia Wastewater Department and as required by regulations of the Tennessee Department of Environment and Conservation (TDEC).
- 2) All sanitary sewer facilities located in a flood hazard area shall be flood proofed to the regulatory flood protection elevation. All sewer facilities located below the regulatory flood protection elevation shall be designed to prevent infiltration of floodwaters into the sewer system and discharges from the system into floodwaters.
- 3) All public sanitary sewer systems shall be constructed utilizing materials approved by the City of Columbia Wastewater Department.

4-12.3 Individual Disposal System Requirements

If public sewer facilities are not available and individual disposal systems are proposed, lot areas shall be a minimum of forty thousand (40,000) square feet and the septic systems and other waste disposal methods must be permitted by the Tennessee State Department of Environment and Conservation (TDEC).

The individual disposal system, including the size of the septic tank and size of the tile fields or other secondary treatment device, also shall be approved by the Maury County Health Department and shown on the final plat.

The Planning Commission may prohibit installation of sewage disposal facilities requiring soil absorption systems where such systems will not function due to high groundwater, flooding, excess of use, or unsuitable soil characteristics. If prohibited, the subdivider shall note on the face of the plat and any deed of conveyance that soil absorption fields are prohibited in designated areas.

4-13 Requirements for Sidewalks and Related Pedestrian Facilities

4-13.1 Requirements for Sidewalks on New Subdivision Streets

Sidewalks are recommended along the street right-of-way line on both sides of new public and private streets, including new extensions of existing streets. All sidewalks and pedestrian ways constructed shall be in accordance with the Engineering Department's construction standards.

4-13.2 Requirements for Sidewalks on Existing Streets

Sidewalks are recommended along the proposed subdivision's frontage on existing public streets. Sidewalks on street(s) fronting the property, that do not comply with the

Engineering Department's standards are recommended to be repaired or replaced as part of a new development.

4-13.3 Design Criteria

Sidewalks shall be included within the dedicated non-traffic way portion of the right-ofway or public access easement. The minimum width of public sidewalks shall be four feet. Where concrete curbs are required or constructed, grass or landscaped areas or strips with a minimum width of 2 feet shall separate all sidewalks from the adjacent street.

- 1) Where extraordinarily difficult topographic conditions exist, other design solutions, such as a wider separation, may be used.
- 2) Where necessary, the Planning Director may require pedestrian access ways from a public way to schools, parks, playgrounds, or other nearby public ways. Reference 4-5.4 Easements through Blocks of these regulations for required width.
- 3) Sidewalks shall be designed and constructed so as to comply with ADA Standards for Accessible Design as published by the U.S. Department of Justice and include any subsequent amendments or supplements.

4-13.4 Waivers and Alternative Pedestrian Ways

When an alternative pedestrian trail or greenway trail meeting City's greenway design standards is proposed to be constructed by the developer, and the trail substantially serves the same purpose as a sidewalk along an existing street, then the applicant may choose to continue the trail section.

4-13.5 Sidewalk Encroachments/Obstructions

Encroachments including, but not limited to utility poles, fire hydrants, parking meters, mailboxes, sign standards, and street furniture shall not be located within the concrete portion of the sidewalk area, unless determined to be compliant by the Engineering Department. However, tree grates, utility grates, and manholes may be permitted within a sidewalk provided three feet of unobstructed clearance is provided on one side, unless less clearance is determined to be compliant by the Engineering Department.

4-13.6 Sidewalk Tree Preservation

When specimen quality trees or other natural features exist, that are desired to be preserved or protected, in the path of a sidewalk, the sidewalk may be located so as to preserve those features. Under such conditions, the sidewalk may be located within a pedestrian easement outside of the dedicated public right-of-way. Exceptions to allow a non-contiguous pedestrian easement may be considered by the Planning Commission, after obtaining a recommendation from the appropriate city agencies.

4-13.7 Sidewalk Pedestrian Easements

To facilitate pedestrian access from streets to existing or planned schools, museums, parks, greenways, playgrounds, or other nearby community facilities, major shopping malls, or commercial amusement activities, the Planning Commission or the Planning Director may require perpetual unobstructed easements or dedications of land measuring at least 10 feet in width on a subdivision plat. Easements shall be indicated on the plat as a "public pedestrian access easement."

4-14 Street Lighting

General Requirements:

1) Necessary action shall be taken by the applicant to have street lights installed in new subdivisions. The Planning Commission shall not approve any final plat of a

subdivision that does not provide adequate street lighting. Street lighting shall be of such size and specifications as deemed appropriate by the utility provider, the City Engineering Department and Zoning Ordinance to meet the specific requirements of the subdivision. Street lights shall be installed between the curb and the sidewalk.

- 2) The subdivider/developer shall bear all costs for the design and installation of street lights in new subdivisions.
- 3) Street lighting installed by an electrical contractor which is not employed by Columbia Power and Water Systems (CPWS) must have their work inspected by the Deputy State Electric Inspector for CPWS service area before the lighting facilities can be energized.

4-15 Utility Easements

The Planning Commission staff may require utility easements. The Planning Commission staff will consult local utilities before requiring utility easements. In Residential Developments, as defined by the Zoning Ordinance, provide 10 foot easement on all property lines parallel and abutting public roads and 5 feet easement on all interior lot lines, except for interior lot lines with a zero lot line or a common wall along a lot line, for utility and drainage easements.

Easements down rear lot lines or additionally across lots, if deemed necessary by the Planning Commission staff, shall be provided for utilities (private or public). Such easements shall be at least 10 feet wide (with sanitary sewer 20 feet minimum width) except for lots that are served by alleys shall provide a common utility easement that parallels the alley and includes periodic extensions of the easement to accommodate transformers and pedestals. The frequency of periodic easements extensions shall be determined by the City Engineer and appropriate local utility agent.

It is recommended that all utilities in residential subdivisions be placed underground within developments located within the City of Columbia limits. Developers that choose to place all utilities underground shall receive a 25% reduction in their Performance Bond (aka) LOC. Where a subdivision proposes public or private alleys, utilities may be above or below ground within the alley.

4-16 Public Uses

4-16.1 Plat to Provide for Public Uses and Service Areas

Whenever a tract to be subdivided includes a school, recreation use, a portion of a major public way, or other public use, as indicated on the land development plan and/or major street or road plan, or any portion thereof, such tract shall be suitably incorporated by the developer into his plat when first presented for review by the Planning Commission. Due consideration shall be given to the allocation of areas suitably located and of adequate size for playgrounds and parks for local neighborhood use, as well as public service areas.

After proper determination of its necessity by the Planning Commission and the appropriate governmental representatives(s) involved in the acquisition and use or such site, and after a determination has been made to acquire the site by the public agency, the site shall be suitably incorporated by the developer into the plat prior to final approval by the Planning Commission and recording of the plat.

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 to be located in whole or in part within

the subdivision, the Planning Commission may require the dedication or reservation of such open space up to a total of 10 percent of the gross subdivision area or water frontage for park, school or recreational purposes.

Easements. The Planning Commission may require easements for utilities and drainage of sufficient widths to permit access for the purpose of construction and maintenance by appropriate parties along the lines of, or across, lots.

Community Assets. Special requirements may be imposed by the governing body if applicant fails to protect community assets such as large trees, water courses, historical spots and similar assets which, if preserved, will add attractiveness and value to the property.

Restriction of Access. When a subdivision fronts on an arterial street, the Planning Commission may require lots to be provided with frontage on a marginal access street.

4-16.2 Referral to the Governmental Agency Concerned

The Planning Commission shall refer any plat proposing public facilities such as school sites, playgrounds, etc., to the public body concerned with acquisition or maintenance of such facilities for its consideration and report. The Planning Commission may propose alternate areas for such acquisition and shall allow the appropriate governmental agency thirty (30) days for reply.

Among the areas which the Planning Commission may propose for public acquisition, when the commission deems it appropriate and consistent with the policies and purposes set forth in these regulations, is any land within a floodway or floodway fringe determined according to the procedure outlined herein.

The acquiring agency's recommendation, if affirmative, shall include a map showing the boundaries and area of the parcel to be acquired and an estimate of the time required to complete the acquisition.

4-16.3 Notice to Property Owner

Upon receipt of an affirmative report, the Planning Commission shall notify the property owner and shall designate on all plats any areas proposed to be acquired by any governmental agency. Upon such designation by the Planning Commission, any reserved portion of any floodway or floodway fringe shall not be altered from its natural state by the developer in any manner whatsoever, except upon written approval of the Planning Commission.

4-16.4 Duration of Land Reservation

The acquisition of land reserved by a governmental agency on the final plat shall be initiated within 24 months of notification, in writing, from the owner that he intends to develop the land. Such letter of intent shall be accompanied by a plat of the proposed development and a tentative schedule of construction. Failure on the part of the governmental agency to initiate acquisition within the prescribed 24 months shall result in the removal of the "reserved" designation from the property involved and the freeing of the property for development in accordance with these regulations.

4-17 Maintenance and Supervision

If a proposed subdivision includes land which is zoned for a commercial or industrial purpose, the layout of the subdivision with respect to such land shall make such provisions as the Planning Commission may require.

4-17.1 Inspections during Construction

- A pre-construction conference shall be required with the appropriate agencies prior to the start of construction on each project. At the pre-construction conference, the contractor and owner shall sign any applicable documentation acknowledging construction and inspection requirements.
- 2) In addition to Section 207 of the TDOT, Standards Specifications for Road and Bridge Construction, provisions for subgrade construction, it is required that immediately before placement of the aggregate base, the street subgrade of any residential, industrial, commercial and/or gated community shall be proof-rolled using a pneumatic tire vehicle with a gross weight of not less that 30,000 (15 Tons) pounds per axle (weigh ticket shall be provided). Proof rolling must be witnessed by authorized personnel of the Columbia Engineering Department. No aggregate base shall be applied until approval of the subgrade has been given.
- 3) All infrastructure construction is to be completed as described in the approved construction plans, construction specifications, and construction inspection requirements of the applicable departments and agencies. It shall be the applicant's responsibility to contact the departments and agencies for requirements.
- 4) The contractor shall give 24 hours notification to the applicable departments or agencies prior to beginning work on each phase of construction including grading, drainage, base stone and paving. All completed work shall be inspected and approved. Failure to obtain the required inspections and approvals may require work to be removed, certifications and testing by a licensed geotechnical engineering firm to be provided or any future acceptance by the applicable department or agency to be jeopardized.

4-18 Responsibility for Open Space Maintenance

Unless otherwise agreed to by the governing body, the cost and responsibility of maintaining common facilities and designated Open Space shall be borne by the property owner, condominium association, homeowners' association, or conservation organization.

4-18.1 Open Space Maintenance Plan

The applicant shall, at the time of Development Plan submission, provide a Plan for Maintenance of designated Open Space and Operation of Common Facilities in accordance with the following requirements. (This Plan may be based on the model by the Natural Lands Trust, Media, PA.)

- 1) The Plan shall define ownership;
- 2) The Plan shall establish necessary regular and periodic operation and maintenance responsibilities for the various kinds of open space (i.e., lawns, playing fields, meadow, pasture, cropland, woodlands, etc.);
- 3) The Plan shall estimate staffing needs, insurance requirements, and associated costs, and define the means for funding the maintenance of the Open Space land and operation of any common facilities on an on-going basis. Such funding plan shall include the means for funding long-term capital improvements as well as regular yearly operating and maintenance costs;
- 4) At the City's discretion, the applicant may be required to escrow sufficient funds for

the maintenance and operation costs of common facilities for up to one year; and,

5) Any changes to the maintenance plan shall be approved by the Planning Commission.

4-18.2 Failure to Maintain

In the event that the organization established to maintain the Open Space Lands and the common facilities, or any successor organization thereto, fails to maintain all or any portion thereof in reasonable order and condition, the City may assume responsibility for maintenance in accordance with Section 4-18.3.

4-18.3 Corrective Action in Event of Failure to Maintain

The City may enter the premises and take corrective action, including extended maintenance. The costs of such corrective action may be charged to the property owner, condominium association, homeowners' association, conservation organization, or individual property owners who make up a condominium or homeowners' association and may include administrative costs and penalties. Such costs shall become a lien on said properties.

End of Section

ARTICLE 5: SUBDIVISION (S) ACCEPTANCE

5-1 Requirements and Procedures for Subdivision Acceptance

At the conclusion of site construction, the following procedures must be followed and all items outlined herein must be completed and the subdivision must pass a final site inspection. The City of Columbia departments that have been involved in the construction oversight process will conduct these inspections.

Construction Inspections. Engineering, Waste Water, CPWS, and Planning office shall inspect and sign off on all new site improvements and infrastructure during construction. **Applicable state inspections** from TDEC (WPC or Division of Water) must be documented as approved before final City acceptance.

5-2 Final Inspection

Before a subdivision will be accepted or a building Certificate of Occupancy will be issued, an **as-built site plan** must be submitted by a fully qualified registrant, licensed in the State of Tennessee, to certify the site is in substantial compliance with the original plans issued for construction.

All applicable departments must give final approval on completed construction and signoff that said improvements meet City Standards as outlined in these Subdivision Regulations and other applicable adopted codes and specifications in effect at the time of the subdivision plat approval. The Engineering Department will be responsible for the final inspection of the streets and drainage improvements which will include, but not be limited to, storm water drainage, street paving, curbing, sidewalks, street lighting, signage and other items included on the approved site plans.

The City Engineering Department will inspect the improvements and issue a punch list of any deficiencies.

- The inspection shall document the existing condition of all roads, streets, bridges, driveway structures, sidewalks and pedestrian access structures, related roadside drainage facilities, signage and traffic control devices, and all other appurtenances related to a complete system of public roads or streets. The complete system of public roads, streets along with all related appurtenances must be in strict compliance with all Federal, State and applicable regulations, codes, statutes and policies in effect at the time of the request for acceptance. Conditions that will be noted on this inspection report will consist of, but not be limited to:
 - a) Curb and Gutter roads: pavement cracks, pavement settlement, birdbaths, lack of joint sealing, spalling joints, other pavement irregularities, cracked curbing, missing curbs, dirt, trash or other debris in right-of-way, broken, cracked, sunken or debris filled storm sewer inlets, broken driveways or sidewalks.
 - b) Low impact design/open ditch roads: depth, width and type of base material and of any black top material; shape of road cross section, ditches holding water, undersized driveway entrance culverts and other adverse drainage conditions.
 - c) Bridges, drainage structures, utilities and all construction located within the road or street right-of-way or directly affecting the proper function of the system of public streets.
 - d) A complete system of signage and traffic control devices in compliance with the Tennessee Manual on Uniform Traffic Control Devices (MUTCD).
 - e) Any and all other items related to the safe operation and maintenance of a complete system of public streets and drainage.

After notification that all deficiencies have been corrected and a final inspection has been completed, the Engineering Department will issue a recommendation to City Council for

the preliminary acceptance of construction and to establish the date of Construction Completion.

- a) Final inspection should be scheduled within 60 days of the initial inspection. A
 complete re-inspection and a new punch list may be required after the sixty day
 period.
- b) Upon approval of preliminary acceptance by City Council, the bond for the roads and street may be reduced per Section 3 of these regulations and the bonds for the drainage facilities may be reduced per Section 3
- c) Preliminary acceptance does not convey the responsibility of maintenance to the City, but does allow for the reduction of the performance bond for a maintenance period.

5-3 One Year Maintenance Required

A one year maintenance bond will be required in an amount of 10 percent or \$5,000, whichever is greater of the original principal amount of the infrastructure within the right-of-way, excluding utility services. It is intended that once a project is complete and the performance bond converted to a maintenance bond, then a follow up inspection will occur before the end of one year period. If no deficiencies are noted, Engineering will recommend final acceptance of the street and drainage improvements; Waste water will separately accept the sewer improvements.

5-4 Acceptance Procedure

A request in writing must be presented to the City of Columbia (Engineering Department) from the developer or his designee for the City to consider preliminary or final acceptance (separate letter at each stage) of a subdivision, or any approved sections therein.

At such time that a final inspection of all improvements has been made and deemed by the appropriate departments to be in compliance with City Subdivision Regulation standards a resolution with a recommendation for preliminary acceptance will be prepared by the Engineering Department and placed before City Council. After the one year maintenance period a follow up inspection will be performed and upon approval the Engineering Department will prepare a City Council Resolution for final acceptance.

5-5 City Council Resolution

The Resolutions to accept either sewer and/or drainage and street improvements will be subject to one (1) reading by the City Council. The process will be complete when the City Council votes to accept the improvements being considered for final acceptance at that time.

5-6 Minimum Standards for Issuance of Building Permits.

No building permit shall be issued for any lot shown on an approved plat until:

- The street and drainage system shall have been completed according to approved construction plans and have driveway access to a street and drainage system that has been completed
- 2) Streets shall meet the standards as set forth by the Engineering Department
- 3) The Planning Department certifies all requirements for compliance with the Zoning Ordinance of the City of Columbia as adopted at the time of the issuance of the permit
- 4) The installation of the sanitary sewer shall have been approved by the appropriate

governmental representative.

5-7 Requirements Prior to Certificates of Occupancy

The following department's issues must be addressed prior to the Building Official issuing a Certificate of Occupancy:

Engineering Dept # (931) 560-1530 Planning Dept. # 931-560-1560 Wastewater System # 931-560-1001 Fire Marshal # 931-560-1740 Code Administration # 931-560-1540 Columbia Power and Water Systems (CPWS) # 931-388-4833

Projects may be phased to achieve Certificate of Occupancy prior to a complete master plan build out. However, the following items need to be understood:

- 1) Once a phase has been given a Certificate of Occupancy, the completed phase shall not be disturbed without appropriate city approvals;
- 2) All departments must individually have their issues addressed in a given phase since each department listed previously has sign off requirements prior to issuance of Certificates of Occupancy.
- 3) When the Certificate of Occupancy for a structure is applied for; and that structure/site fails to meet approval by the Engineering Department, then a reinspection fee shall be imposed for each subsequent inspection.

ARTICLE 6: DEFINITIONS

Unless otherwise stated, the following words shall, for the purpose of these Subdivision Regulations, have the meanings herein indicated. Words used in the present tense include the future; the singular includes the plural and the plural the singular. More specifically, any word or term defined in the Columbia Zoning Ordinance shall have the definition contained in that ordinance, unless defined differently below; other words and terms used herein are defined as follows:

Alley: A minor public way used primarily for access to the back or side of properties otherwise abutting a street.

Approved Automatic Fire Sprinkler System: a fire sprinkler system installed in accordance with latest National Fire Protection Association Standards.

Applicant: The person applying for subdivision approval under these regulations. This shall be the Owner and Developer. If these persons are not the same then both shall be individually listed as the applicant.

Building (See Zoning)

Block: A parcel of land intended to be used which is entirely surrounded by public streets, railroad rights-of-way, public walks, parks or green strips, rural land or drainage channels or any combination thereof.

Buffer: A combination of physical space and vertical elements, which may be existing vegetation or installed elements such as plants, berms, fences, or walls. (See Zoning Article 11)

Buffer, Riparian

The area of natural or planted vegetation adjacent to a natural watercourse as measured landward from the normal pool elevation of impounded structures and from the bank of each side of streams, rivers, lakes, ponds, or wetlands which is intended to remain undisturbed. (See Aquatic Buffer Ordinance #3736)

Building Line or Setback Line: A line or lines designating the area within which buildings may be erected.

Conservation Subdivision: (See Zoning)

Comprehensive Plan: (See Zoning)

Construction Plan: Constructable plans prepared by appropriate design professionals addressing site-specific parameters as outlined (See Section 2-8).

Cul-de-Sac: A minor street having a closed dead-end with an appropriate terminal for the safe and convenient reversal of traffic movement.

Design Review Committee: (See Zoning)

Driveway: A vehicular access way serving two lots or less.

Easement: A grant by a property owner to the public, a corporation or persons of the use of land for specific purposes.

Compliance Office: (See Article 1-2)

Escrow: A fiduciary agreement with the local government in lieu of actual performance and intended to assure performance. An escrow account may be provided as a bond subject to agreement of the governing body.

Final Plat: A map of a land subdivision prepared in a form suitable for filing of record with necessary affidavits, dedications and acceptances and with complete bearings and dimensions of all lines defining lots and blocks, streets and alleys, easements, public areas and other dimensions of land (See Section 2-9).

Greenbelt: An undisturbed area of existing vegetation surrounding a development that is left intact as a buffer.

Greenway: Linear undeveloped area linking various types of development by such facilities as bicycle paths, footpaths, and bridle paths. Greenways should be kept in their natural state except for the pathway and areas immediately adjacent to the pathway.

Low Impact Development (LID): A sustainable [design] approach that can be used to replicate or restore natural watershed functions and/or address targeted watershed goals and objectives. (Source: U.S. Environmental Protection Agency)

Lot: (See Zoning)

Lot of Record: (See Zoning)

Open Space (See Zoning Standards in Section 12.7)

Open Space, Common (See definition in Zoning Ordinance)

Owner: Includes any person who is the holder of legal title as well as holders of any equitable interest, such as trust beneficiaries, contract purchasers, option holders, lessees under leases having an unexpired term of at least 10 years, and the like. Whenever a statement of ownership is required by this article, full disclosure of all legal and equitable interests in the property is required.

Planned Unit Development (PUD): (See Zoning)

Preliminary Plat: A map of a proposed land subdivision showing the character and proposed layout of the tract in sufficient detail to indicate the suitability of the proposed subdivision of land (See Section 2-7).

Sketch Plat: Conceptual maps, renderings, and supportive data describing the project proposed by the applicant for initial departmental review prior to submitting an application for subdivision approval.

Streets: (See Zoning)

Street, Arterial: A street designed and intended for use by large volumes of through traffic; receives traffic flow from collector and local streets, allows for major movement between areas of the City and usually has heavy traffic moving at relatively high speeds.

Street, Collector: A street which carries traffic from local streets to the arterial system; consists of principal entrance streets for residential, commercial and industrial developments and provides for major circulation within such developments.

Street, Frontage or Service: A local street auxiliary to and located on the side of an arterial or collector street to provide service to abutting properties and to control access to arterial and collector streets.

Street, Local: A street used primarily for access to abutting properties and designed to discourage use by through traffic; may consist of dead-end or cul-de-sac streets designed so that they cannot be extended in the future and may be marginal access streets which are parallel and adjacent to arterial streets.

Subdivider: Any person, firm, partnership, corporation or other entity, acting as a unit, subdividing or proposing to subdivide land.

Subdivision: The division of a tract or parcel of land into two (2) or more lots, sites, or other divisions requiring new street or utility construction, or any division of less than five (5) acres 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 resubdividing or to the land or area subdivided.. (See Sections 13-3-401 and 13-4-301, TCA.)

Transportation Master Plan (TMP): May also be referred to as the Major Thoroughfare Plan. Works from the goals outlined in Columbia's Comprehensive Plan to identify specific projects and programs to address transportation needs and objectives and prioritizes improvements.

Traditional Neighborhood Design (TND): Refers to the development that includes a range of housing types, a network of well-connected streets and blocks, public park spaces, commercial, and civic uses within walking distance of residences.

APPENDIX A: **Plat Certificates**

- A.1 Certificate of Ownership and Dedication
- A.2 Certificate of Survey Accuracy
 A.3 Certificate of Approval of Water System
- A.4 Certificate of Approval of Streets, Drainage, and Utilities
- A.5 Certificate of Approval for Recording
- A.6 Certificate of Approval of Subdivision Name, Street Names and Street Signs
- A.7 Certificate of Approval of Sewer System

A.1 C	ertificate	ot	Ownership	and	Dedication
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Registers Office, ar consent, establish t	d in Book Number, pag d that I (we) hereby adopt this pla ne minimum building restriction lin blic ways, utilities, and other facili	n of subdives, and the	vision with my (our) free at offers of irrevocable
	, 20		
Date	Owner		
Title (if action	for partnership or corporation)		
Certificate of Surv	ey Accuracy		
I (we) hereby certify	that to the best of my (our) knowl	edge and	belief this is a true and
accurate survey of t	he property shown hereon; that the irvey as defined in Title 62, Chapt precision is greater than or equal	is is a clas er 18, <u>Ten</u> to 1:	ss "" nnessee Code Annotated,
accurate survey of t	he property shown hereon; that th irvey as defined in Title 62, Chapt	is is a clas er 18, <u>Ten</u> to 1:	ss "" nnessee Code Annotated,
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A.4	Certificate of Approval of Streets, D	rainage, and Utilities			
		ordance with City specifications, or a performant for streets and drainage has been posted with the			
	City Engineer Columbia, Tennessee	Date			
A .5	Certificate of Approval for Recording				
	I hereby certify that the subdivision plat shown hereon has been found to comply with the Columbia Subdivision Regulations, with the exception of such variances, if any, as noted in the minutes of the <u>Planning Commission</u> , and that it has been approved for recording in the Office of the County Register.				
	Secretary, Planning Commission Columbia, Tennessee	Date			
A .6	Certificate of Approval of Subdivision	on Name, Street Names and Street Signs			
	Subdivision name and street names ap by E-911 Maury County.	pproved by the City Engineering Department and	t		
	City Engineer Columbia, Tennessee	Date			
A .7	Certificate of Approval for Sewer Sy	ystem			
	has been installed in accordance with t	outlined or indicated on this final subdivision plat the current local and state government ther surety has been filed to guarantee said	i		
	Director of Wastewater Department Columbia, Tennessee	Date			

APPENDIX B: Subdivision Development Agreement

SUBDIVISION DEVELOPMENT AGREEMENT

THIS DEVELOPMENT AGREEMENT is made and entered into on thisday of, 20, by and between THE CITY OF COLUMBIA, TENNESSEE, (hereinafter the "CITY"), and the DEVELOPER (hereinafter the "DEVELOPER") named on the Addendum to this Agreement attached hereto and by this reference made a part hereof (hereinafter the "ADDENDUM").
WITNESSETH:
WHEREAS, the DEVELOPER desires to develop the property described on the ADDENDUM (hereinafter called the "PROJECT"); and,
WHEREAS, the Development Plan of the PROJECT has been approved by the Columbia Municipal Planning Commission (hereinafter the "Planning Commission") on theday of
WHEREAS, the DEVELOPER is the owner of the PROJECT and has authority to engage in such development; and,
WHEREAS, the DEVELOPER desires to develop and improve said PROJECT; and,
WHEREAS, in order to provide for the health, safety and welfare of future residents of the PROJECT, it will be necessary for certain improvements to the CITY'S utility systems and public infrastructure to be constructed within and to serve the PROJECT. Public infrastructure shall include, but not be limited to, roads, bridges, sidewalks, storm water conveyance and detention systems, street signs, markings, signals and the like; and,
WHEREAS, in order for said improvements to be fully integrated with the utility systems and public infrastructure of the CITY and to function in a satisfactory manner, the DEVELOPER has agreed to construct in accordance with the Subdivision Regulations and other rules, regulations and ordinances of the CITY public improvements in said project and extend utilities to the project at his own cost; and,
WHEREAS, the CITY is willing to accept the dedication of the streets, utilities and other improvements subject to the applicant's compliance with all requirements in this agreement and applicable existing laws of the CITY of Columbia and the State of Tennessee,
NOW, THEREFORE, in consideration of the premises and mutual covenants of the parties herein contained, it is agreed and understood as follows:

I. GENERAL CONDITIONS

A. Construction Costs

The DEVELOPER shall pay for all material and labor necessary to install and complete the roads, sidewalks, sewers, utilities and other facilities in accordance with this agreement.

B. Bonding

At the time of execution of this agreement, the DEVELOPER agrees that prior to recording a final plat, said DEVELOPER shall give the CITY an Irrevocable Letter-of-Credit, on a bank licensed to do business in Tennessee and insured by the FDIC, irrevocable without conditions, and callable upon a bank doing business in Columbia, Tennessee, in an amount determined by the Engineering Department for utilities and improvements, including roads. sidewalks, drainage, and other improvements specified by the plans and plats of the development approved by the CITY and the Planning Commission. This Letter-of-Credit shall secure performance of all obligations of the DEVELOPER under this agreement pursuant to Planning Commission approved plans and filings. The Letter-of-Credit shall meet all requirements established in Article 3 (ASSURANCE FOR COMPLETION AND MAINTENANCE OF IMPROVEMENTS) of the Subdivision Regulations and secure full compliance with all terms and conditions of this agreement, including payment of all amounts payable by the DEVELOPER or DEVELOPER'S obligations hereunder, and its obligations under the warranty and indemnification provisions hereof. The Letter-of-Credit may be called for failure to comply with the provisions of this agreement in whole or in part according to the terms of the Letter-of-Credit. The Letter-of-Credit will not be released, except and until there has been full compliance with this agreement and upon certification of a licensed engineer that the development has been completed in full compliance with the approved plat and construction plans.

C. <u>Inspection</u>

The CITY shall have a continuous right to inspect the work and facilities to assure that the facilities are constructed in accordance with the Subdivision Regulations and approved construction plans.

D. Right of Entry

The CITY shall have the right, in case a Letter-of Credit is called for noncompliance, to enter upon any property of the DEVELOPER and take all necessary actions to complete the work and obligations not completed.

E. Acceptance of Facilities

Upon notice by the CITY of acceptance of all or part of the facilities, then those facilities specified in the acceptance shall become the property of the CITY free from all claims from any person or entity without the necessity of any further writing, agreement, or deed. The parties intend that this agreement shall operate as a conveyance of the facilities when the facilities are accepted. The DEVELOPER further agrees that any facilities placed within a public or platted right-of-way or dedicated public easement are irrevocably dedicated to the public use without any right of reimbursement or compensation of any kind.

F. Failure to Install

In the event the DEVELOPER fails to install the facilities in accordance with the terms of this agreement, the CITY may, in its sole discretion, elect to accept all or a portion of the facilities installed. Should the CITY choose to accept all or a portion of these facilities, the CITY shall become the sole owner of these facilities. The CITY may give notice of acceptance by writing delivered to the DEVELOPER or recorded in the Register's Office of Maury County, Tennessee. No further writing or deed shall be required. The CITY'S election to accept such facilities shall not be construed as an assumption of any obligation related to these facilities such as the obligation to maintain the facilities or to pay for any part of the cost of installing the facilities.

G. Fees Not Refundable

If the DEVELOPER fails to install the facilities in accordance with the terms of this Agreement, no portion of the review fees or other amounts paid to the CITY shall be refundable to the DEVELOPER.

H. Legal Expense in Case of Default

In the event the DEVELOPER or its sureties breach this agreement, they shall bear all costs of the CITY'S reasonable expenses, including attorney's fees and other expenses incurred in enforcing or completing this agreement, whether incurred by negotiation, litigation or otherwise.

I. <u>City Ordinances, Rules and Regulations</u>

All currently existing CITY ordinances, rules and regulations and the Subdivision Regulations adopted by the Planning Commission are made a part of this agreement.

In the event of a conflict between the terms of this agreement and a CITY ordinance, the ordinance shall prevail. In the event of a conflict between the terms of this agreement and the Subdivision Regulations, the Subdivision Regulations shall prevail. All work done under this agreement is to be performed in accordance with plans, and specifications approved by the City and made a part, hereof.

J. Agreement Not Assignable

No third party shall obtain any benefits or rights under this agreement nor shall the rights or duties be assigned by either party.

K. Revocation and Interpretation

This agreement shall bind DEVELOPER when executed by DEVELOPER and may not be revoked by DEVELOPER without permission of the CITY, even if the agreement has not been executed by the CITY, or does not bind CITY, for other reasons. This agreement shall be interpreted in accordance with Tennessee law and may only be enforced in the Chancery Court or Circuit Court or Court of competent jurisdiction of Maury County, Tennessee, and Tennessee Appellate Courts.

L. No Oral Agreement

This agreement may not be orally amended and supersedes all prior negotiations, commitments or understandings.

M. Separability

If any portion of this agreement is held to be unenforceable, the CITY shall have the right to determine whether the remainder of the agreement shall remain in effect or whether the agreement shall be void and all rights of the DEVELOPER pursuant to this agreement terminated.

N. Transferability

The DEVELOPER or Owner agrees that he will not transfer the property on which this proposed subdivision is to be located without first providing the CITY with notice of when the transfer is to occur and who the proposed transferee is, along with appropriate address and telephone numbers. If it is the transferee's intention to develop this subdivision in accordance with the agreement, the DEVELOPER agrees to provide the CITY an Assumption Agreement whereby the transferee agrees to perform the improvements required under this agreement and to provide the security needed to assure such performance. Said agreement will be subject to the approval of the CITY Attorney. The DEVELOPER and Owner understand that if he transfers said property without providing the notice of transfer and Assumption Agreement as required herein, he will be in breach of this agreement and in violation of the subdivision regulations. The DEVELOPER further agrees that he shall remain liable under the terms of this agreement though a subsequent sale of all or part of said property occurs, unless an Assumption Agreement is entered into between the new owners and the CITY and a new agreement and Performance Bond is issued naming the new owners as principal.

O. Covenants, Conditions and Restrictions to Be Filed

In the event a home owners' association is required or will be established, the DEVELOPER will submit a Declaration of Covenants, Conditions and Restrictions to be filed with and recorded with the final plat. The Declaration of Covenants, Conditions and Restrictions shall contain all provisions required by the Zoning Ordinances, of the CITY and shall include provisions for a home owners' association to maintain all detention or retention ponds. common drainage ditches and any and all common areas. The Declaration of Covenants, Conditions and Restrictions shall contain provisions for the CITY, to have the right, but not the obligation, to enforce any restrictions dealing with health, safety, and welfare which could be, otherwise, enforced by any land owner of record in the development. The Declaration of Covenants, Conditions and Restrictions shall also contain provisions for assessments of property for maintenance of common areas and provisions for enforcement of the assessments by liens, removal of voting rights, and enforcement at law and equity. The Declaration of Covenants, Conditions and Restrictions shall make adequate and sufficient provisions for the maintenance of any commonly owned detention ponds or drainage areas to include an amortizing of maintenance costs to be provided to the home owners' association by the DEVELOPER at the time of the establishment of the home owners' association. The Declaration of Covenants, Conditions and Restrictions shall run with the land and must be approved by the Planning Department, prior to recordation, as a part of the final plat.

P. Time Period for Construction

In consideration of the promise by the CITY to accept for maintenance the streets, utilities and other infrastructure covered by this agreement, the DEVELOPER agrees to be bound to complete within two (2) years of commencement of construction all improvements shown on the plat and plans and all things required by this agreement. The DEVELOPER further agrees that if due to unforeseen circumstances, he is unable to complete all work included in this agreement within the time specified above, but desires to complete said agreement to the satisfaction of the CITY, he shall submit a written request for extension of the agreement period to the CITY at least sixty (60) days prior to the expiration of the existing agreement period, specifying the reason for his failure to complete the work as agreed and a prospective date for such completion. The DEVELOPER further agrees that if the bond (Letter-of-Credit) executed to secure the value of the work to be performed under this agreement, due to inflation or rising costs, is inadequate to secure the cost of said improvements at the time an extension is sought, he will provide the additional security to bring the bond amount in line with current cost projections as made by the CITY. The CITY agrees that it will not unreasonably withhold approval of extensions where the DEVELOPER has complied with the requirements of notice to the CITY and provided the required additional security, if any is needed. The DEVELOPER understands that his failure to follow this extension procedure constitutes a breach of this agreement and places him in violation of the Subdivision Regulations. The DEVELOPER further understands that should he fail to complete any part of the work outlined in this agreement in a good and workmanlike manner as approved the CITY shall reserve the right to withhold and withdraw all building permits and sewer service within the subdivision until all items of this Agreement have been fulfilled by the DEVELOPER.

II. DESIGN AND APPROVAL

A. Contents of Plans

The DEVELOPER shall cause to be prepared and submitted to the CITY, plans (the "Plans") describing in reasonable detail all utility systems, all storm water management systems, and all street system improvements necessary to provide adequate services to the Project (hereinafter called the "IMPROVEMENTS"). The plans shall include all information required by Section 2-8 (Construction Plans) of the Subdivision Regulations and any other details as requested by the CITY. It is recognized that the IMPROVEMENTS may be constructed in phases as the Project is developed. The DEVELOPER shall submit the Plans as provided herein for each phase and execute a separate DEVELOPMENT AGREEMENT for each phase.

B. Preparation of Plans

The Plans shall be prepared by an engineer licensed by the State of Tennessee to design all systems and shall bear the seal, signature, date and license number of the engineer preparing the Plans

C. Design Criteria

The design of water and sewer improvements shall follow the State of Tennessee and Columbia Water and Sewerage Systems design criteria. Storm water management and road improvements shall be designed according to the Subdivision Regulations, all other applicable municipal specifications and ordinances and sound engineering judgment. In all cases, the specifications and design details for the Improvements shall be those of the CITY and those as approved by the State of Tennessee Department of Environment and

Conservation. CITY requirements will control if more stringent that State standards. In the event of a disagreement as to compliance with or interpretation of the Plans and the CITY'S specifications, the decision of the CITY shall be final and binding on the DEVELOPER. Five (5) sets of the Plans shall be submitted by the DEVELOPER to the CITY. The CITY Engineering Department agrees to review the Drawings and Plans so submitted in a timely manner. DEVELOPER agrees to make all revisions to the Plans as required by the CITY. Following review and approval of the Plans, or following review and approval of revised Plans if revisions have been required, a representative of the CITY Engineering Department will sign the Plans. The DEVELOPER must then submit the Plans, as approved by the CITY Engineer, to the Tennessee Department of Environment and Conservation for approval.

III. COMMENCEMENT OF CONSTRUCTION

Construction of Improvements may not begin until the following events have occurred:

- A. The Plans are approved by the CITY, and all necessary facets of platting and construction plan approval, through the Planning Commission, have been completed.
- B. The Tennessee Department of Environment and Conservation has approved the applicable portions of the Plans and has confirmed its approval to the CITY and/or DEVELOPER in writing.
- C. If required, the review fee described in Paragraph XIII (FEES), hereof, has been paid in full.
- D. The CITY shall have received an appropriately executed Development Agreement.
- E. The DEVELOPER shall give the CITY notice of commencement of construction, in writing at least one (1) working day prior to commencement.

IV. CONSTRUCTION

A. <u>Utilities</u>

DEVELOPER agrees to pay the cost of a State approved sewage system complete with necessary stations and force mains and with manholes, outside the boundary of the subdivision as approved by the CITY. The DEVELOPER further agrees to pay the cost of sewer mains, manhole, and sewer service laterals from the sewer main to the front property line of each lot within the subdivision as approved by the CITY upon the subdivision plans and specifications. The DEVELOPER further agrees to pay the cost of all engineering, inspection and laboratory testing costs incidental to the sewer service in or to the subdivision. The DEVELOPER shall be responsible for the cost of any and all relocation, adjustment, modification, installation and removal of utilities brought about as a result of the development of the project, including street cut repair, both on and off site. As a part of constructing the Improvements, the DEVELOPER shall install, in accordance with the Plans and CITY specifications, all water service taps, fire lines, sewer service, and all facilities, equipment and accessories relating, thereto, necessary to provide utility service to the Project.

B. Storm Water Management Systems

The DEVELOPER shall be responsible for all storm water management work, including ditch stabilization, bank protection, and fencing adjacent to open ditches made necessary by the development of this subdivision.

- 1. The DEVELOPER shall provide and deliver the formal written opinion of a licensed and bonded professional engineer certifying that he has reviewed the entire water shed wherein the subdivision is located and that upon full development at the greatest allowable use density under existing zoning of all land within that watershed, the proposed subdivision will not increase, alter or affect the flow of surface waters, nor contribute to same, so as to damage, flood or adversely affect any property. Further, the DEVELOPER agrees to hold harmless and defend the CITY from any claim, cause of action or liability, alleged and/or proven, to have arisen directly or indirectly from alteration to the surface water by reason of the DEVELOPER'S design, construction, installation or the development itself, in whole or part.
- 2. To properly manage storm water runoff during the construction process the DEVELOPER shall provide necessary erosion control in accordance with the storm water management plan for the development as approved by the CITY in conformance with the published design standards and specifications of the CITY. All freshly excavated and embankment areas not covered with satisfactory vegetation shall be fertilized, mulched and seeded and/or sodded as required by the CITY to prevent erosion. In the event the CITY determines that necessary erosion control is not being provided by the DEVELOPER, the proper authority shall officially notify the DEVELOPER of the problem. If the DEVELOPER has not begun to provide satisfactory erosion control within five (5) days after the notice, then the proper authority shall issue a stop work order to be effective until satisfactory erosion control measures have been provided.
- 3. Any and all unenclosed water courses lying partially or wholly within the bounds of this subdivision shall be constructed to adequate cross section to provide design flow without threat of erosion or flooding of any property within this subdivision, or of any adjoining property.
- 4. All storm water management structures necessitated by the infrastructure plans for this development that affect any watercourse lying partially or wholly within this subdivision are to be provided by the DEVELOPER.
- 5. It is understood and agreed that the CITY in its proprietary function is not and could not be expected to oversee, supervise, or direct the construction of all drainage improvements, and the excavation incident thereto. Neither is the CITY vested with the original design responsibility nor the means to formally survey elevations or the locations of improvements at every stage of the construction process. The CITY is vested with the right of periodic inspections, stop work order and final approval as a measure of secondary or subsequent enforcement. The DEVELOPER has and shall retain the responsibility to properly anticipate, survey, design and construct the subdivision storm water improvements and give full assurance that same shall not adversely affect the flow or quality of surface water from or upon any property. In providing technical assistance, plan and design review, the CITY does not and shall not relieve or accept any liability from the DEVELOPER.

C. Street Construction

The DEVELOPER, hereby, agrees to construct and improve the streets shown on the Plans to comply with the construction standards of the CITY and to the satisfaction and approval of the CITY Engineer by grading, draining, subgrade preparation, base preparation, curb and gutter, signage, striping, signalization sidewalk installation and paving with the required amount of material the full required width. The DEVELOPER further agrees to pay the cost of all engineering, inspection and laboratory cost incidental to the construction of subdivision streets including but not limited to material and density testing.

- 1. It is agreed and understood that all grading within the street right-of-way and public easements shall be completed before the utilities are installed.
- 2. The DEVELOPER further agrees to furnish and install asphalt base and a final asphalt surface course (wearing surface) in accordance with the Subdivision Regulations. The final surface shall be placed at least one (1) year (twelve (12) consecutive months) after acceptance of the streets, but not more than two (2) years (twenty-four (24) consecutive months) unless a time extension is requested, and approved by the CITY. The DEVELOPER may request to install final surface within the first twelve months of acceptance if building activity is seventy-five (75) percent complete or otherwise specifically approved by the CITY.
- 3. The DEVELOPER further agrees to make all necessary adjustments to manholes and valve boxes to meet finished surface grade and to repair subsurface or base material, as required, in areas recommended by the CITY Engineer, prior to application of final surface. It is further agreed and understood that if it is not necessary to change the existing grade or disturb the pavement of an existing street or road, the DEVELOPER shall only be required to construct drainage, grade, gravel and pave to match the existing pavement and construct sidewalks and curb and gutter as required. If the existing grade is changed, the DEVELOPER shall be required to grade, gravel and pave the full width of said street.

D. Site Grading

The DEVELOPER, hereby, agrees to construct all site grading as shown on the Development plans to comply with the approved drawings, including the approved Erosion Control Plan for the development and to comply with the Subdivision Regulations, Stormwater Management Regulations, and other rules, regulations and ordinances of the CITY.

V. OFF-SITE IMPROVEMENTS (UTILITIES)

The DEVELOPER shall construct any and all off-site facilities that may be required to serve the Project, not including any additions, improvements and upgrades. Unless specifically noted in the Plans and made a part of this agreement, the CITY shall not be required to reimburse the DEVELOPER for construction of off-site Improvements if additional customers should later use the off-site facilities financed by the DEVELOPER.

VI. INSPECTION AND COMPLIANCE

After construction begins, the CITY shall provide on-site construction inspection as the CITY deems necessary to insure that all work is performed and completed in accordance with the Plans, the City's specifications and the contents of this agreement. In the event of a disagreement as to compliance with or interpretation of the Plans and the CITY'S specifications, the decision of the CITY shall be final and binding on the DEVELOPER. If the DEVELOPER fails to construct in accordance with the approved Plans or to comply with the CITY'S specifications, the CITY may issue a stop-work order and DEVELOPER, hereby, agrees to be bound by such order.

VII. TESTING

The DEVELOPER agrees to pay the cost of all engineering, inspection and laboratory cost incidental to construction of the streets, sidewalks, utilities, sewers, compacted fill material and other facilities included within this agreement. Such testing includes, but is not limited to, material and density testing.

VIII. SCRAP REMOVAL

The DEVELOPER agrees that he will comply with all local, state, and federal rules and regulations regarding waste material and debris disposal.

IX. <u>ACCEPTANCE (ROADS AND UTILITIES)</u>

At such time as the improvements have been constructed and installed, in accordance with the Plans and specifications, required testing has been accomplished and the test results found satisfactory, and all clean-up and cover-up has been done to the satisfaction of an authorized representative of the CITY, a letter of tentative acceptance of construction will be provided by the DEVELOPER. Formal acceptance shall follow the procedure established in the Subdivision Regulations.

The DEVELOPER agrees he shall have no claim, direct or implied, in the title or ownership of the improvements specified in this agreement when the approved phases are completed and thereafter accepted by the CITY. The CITY, upon final approval and preliminary acceptance, will take full title to the improvements and will provide maintenance thereafter, except that the DEVELOPER will be responsible for construction failures and defects in the subdivision for one (1) year after the date of preliminary acceptance of the subdivision construction. During this period, it shall remain the responsibility of the DEVELOPER to correct and cure these defects and failures.

X. WARRANTY

The DEVELOPER warrants that all installed facilities are free from defects in design, materials or workmanship for a period of one (1) year from the date of written preliminary acceptance by the CITY. Further, the DEVELOPER shall immediately repair, at its own costs, all defects of any type whatsoever which occur within one (1) year from the date the facilities are accepted in writing by the CITY. The CITY shall have the right to make repairs or have others make the repairs at the expense of the DEVELOPER, if the CITY deems it necessary. The DEVELOPER shall pay for all work, labor, materials and all other expenses of the facilities in a timely manner and this shall include any amounts that exceed the letter-of-credit. If the DEVELOPER does not pay in a timely manner, the DEVELOPER hereby authorizes the CITY to call payable its Letter-of-Credit, without any formal or further action, and to make the payments that are due for the facilities whether the debts are secured by a valid lien.

The DEVELOPER further agrees to execute a maintenance bond (Letter-of-Credit) with good IN WITNESS WHEREOF, the parties hereto have caused this instrument to be executed in multiple originals by persons properly authorized so to do on or as of the day and year first given. security in the amount of twenty-five (25) percent of the construction cost of the facilities being offered for dedication. Twelve (12) months after preliminary acceptance of the facilities included in the offer of dedication, a follow up inspection will be made by the CITY to determine and list any defects or failures of improvements within the subdivision. All failures

or defects, if any, shall be repaired within thirty (30) days, after which the bond will be released and cancelled by CITY.

XI. EASEMENTS

The DEVELOPER shall obtain and dedicate to the CITY or cause to be dedicated to the CITY, either by dedication on the plat or by easement deed, in either case in a form acceptable to the CITY, permanent easements of such widths as required by the CITY and noted on the Plans. The DEVELOPER or the Owner further agrees that he will grant the necessary easement and rights-of-way across his properties without expense to the CITY and waive any claim for damages.

XII. AS-BUILT DRAWINGS AND POST-COMPLETION ITEMS

The DEVELOPER agrees to furnish to the CITY as-built plans, on a reproducible, stable media, of the sanitary sewer, storm water management, water mains and service system and streets within the subdivision before the CITY shall accept the subdivision.

XIII. FEES

Review fees established by the CITY shall be paid prior to any review of the Plans. No construction or grading of any sort shall be begun prior to approval of such plans.

XIV. INDEMNITY

The DEVELOPER shall indemnify and hold the CITY harmless from all loss, costs, expenses, liability, money damages, penalties or claims arising out of any work covered by this agreement, including any attorney fees incurred by the CITY in connection therewith. Inspection of the Improvements by an authorized representative of the CITY shall not constitute a waiver by the CITY of any defect or of any of the DEVELOPER'S obligations hereunder.

XV. REMEDIES

In the event of a default in the performance by either party of its obligation hereunder, the other party, in addition to any and all remedies set forth herein, shall be entitled to all remedies provided by law or in equity, including the remedy of specific performance or injunction.

XVI. BINDING EFFECT

The covenants and agreements herein contained shall bind and endure to the benefit of the parties hereto, their respective heirs, personal representatives, successors and assigns, as appropriate.

XVII. ATTORNEY'S FEES AND OTHER COSTS

The DEVELOPER shall pay all costs and expenses, including the CITY'S attorneys' fees, of any legal proceedings brought by the CITY against the DEVELOPER seeking remedies for the DEVELOPER'S failure to perform any of its obligations hereunder, whether or not any proceedings are prosecuted to judgment.

XVIII. ENTIRE AGREEMENT

This document contains the entire agreement between the parties, and there are no collateral understandings or agreements between them, and no variations or alterations of the terms of this

agreement shall be binding upon either of the parties, unless the same be reduced to writing and made an amendment to this agreement.

XIX. HEADINGS

Paragraph titles and headings contained herein are inserted for convenience only and shall not be deemed a part of the Agreement and in no way shall define, limit, extend or describe the scope or intent of any provision, hereof.

XX. NOTICES

Any notice or other communication required to be given hereunder shall be in writing and delivered personally or sent by United States Certified Mail, return receipt requested, or sent by Federal Express Delivery Service, addressed to the CITY Engineer at City Hall and addressed to the DEVELOPER at the address set forth on the Addendum, or such other address as either party may hereafter give the other.

XXI. TRAFFIC CONTROL

The DEVELOPER, hereby, agrees to prepare a traffic control/detour plan where required and shall submit said plan to the CITY for review and approval. All traffic control and safety devices, including signs, lane markings, and barriers necessitated by construction activity undertaken pursuant to this agreement shall be installed and maintained by the DEVELOPER. All traffic control devices shall meet the standards and be installed in accordance with the latest edition of the Manual on Uniform Traffic Control Devices for Streets and Highways, published by the United States Department of Transportation.

XXII. TEMPORARY FACILITIES

The DEVELOPER shall provide all temporary facilities, including but not limited to utilities and roadways, that are determined by the CITY to be required in connection with or as a result of interruption of service or access that occurs as a consequence of construction activity associated with the work covered by this agreement. Such temporary services shall in all regards and at all points in time be adequate to assure emergency access and adequate fire flows.

IN WITNESS WHEREOF, the parties hereto have caused this instrument to be executed in multiple originals by persons properly authorized so, to do on or as of the day and year first given.

OWNER	DEVELOPER
TITLE	TITLE
ATTEST:	ATTEST:
TITLE	TITLE
IIILE	IIILE
CITY OF COLUMBIA	
BY: MAYOR	DATE
APPROVED AS TO FORM:	
BY:	
CITY ATTORNEY	DATE

APPENDIX C: Engineering Standards & Details

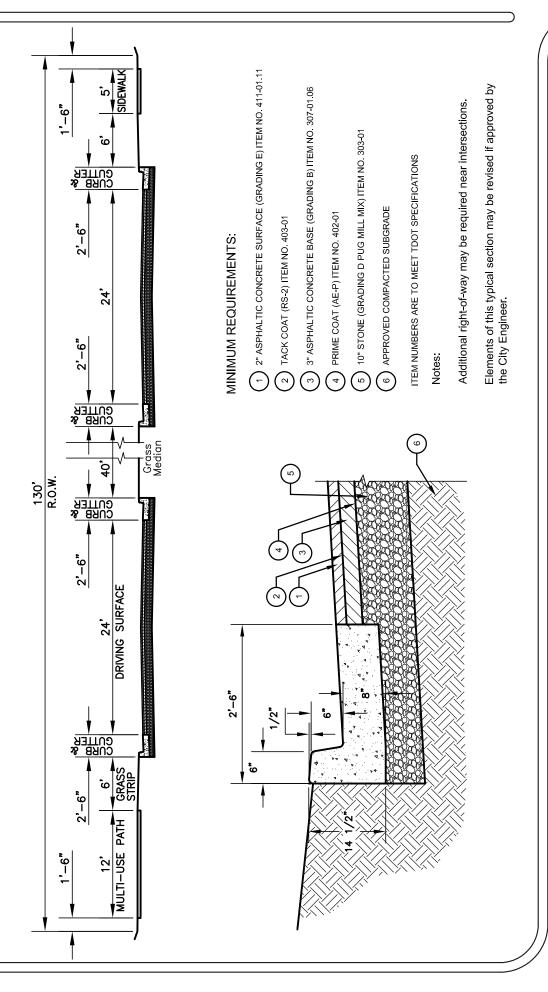
Detail	DWG No.
STREETS DETAILS	
Major Arterial Major Collector /Minor Arterial Minor Collector Residential Collector / Local Street Industrial / Commercial Street Section Standard Alley Section Conservation Street Section Turn-a-round Details Mountable Curb Detail Curb and Gutter Section Driveway Apron (Residential) Driveway Apron (Commercial) Sidewalk Detail Handicap Ramp Detail Detectable Warning Street Design Standards	SD-01 SD-02 SD-03 SD-04 SD-05 SD-06 SD-07 SD-08 SD-09 SD-10 SD-11 SD-12 SD-13 SD-14 SD-15 SD-16
DRAINAGE DETAILS	
Single Vane Grate - Curb & Gutter Section Single Vane Grate – Extruded Curb Section Area Drain Concrete Endwall Concrete Endwall With Energy Dissipation Trapezoidal Ditch Section Typical Lot Swale	DD-01 DD-02 DD-03 DD-04 DD-05 DD-06 DD-07
EROSION / SILTATION DETAILS	
Construction Access Catch Basin Inlet Protection Area Drain Inlet Protection Siltation Control Fence Combination Siltation Barrier Stone Filter Ring Check Dam Detail Sediment Basin Detail Slope Stabilization	ES-01 ES-02 ES-03 ES-04 ES-05 ES-06 ES-07 ES-08 ES-09

MISCELLANEOUS DETAILS

Street Continuation Sign	MD-01
Dumpster Pad & Fence Detail	MD-02
Handicap Parking & Ramp Details	MD-03
Parking Lot Pavement Section Details	MD-04
Property Addresses	MD-05
Street Cut Repair	MD-06

PREFERRED AESTHETICS DETAILS

Subdivision Entrance Detail	PD-01
Mast Arm For Traffic Signal	PD-02
Standard Street Light	PD-03
Standard Mail Box	PD-04
Stop Sign	PD-05



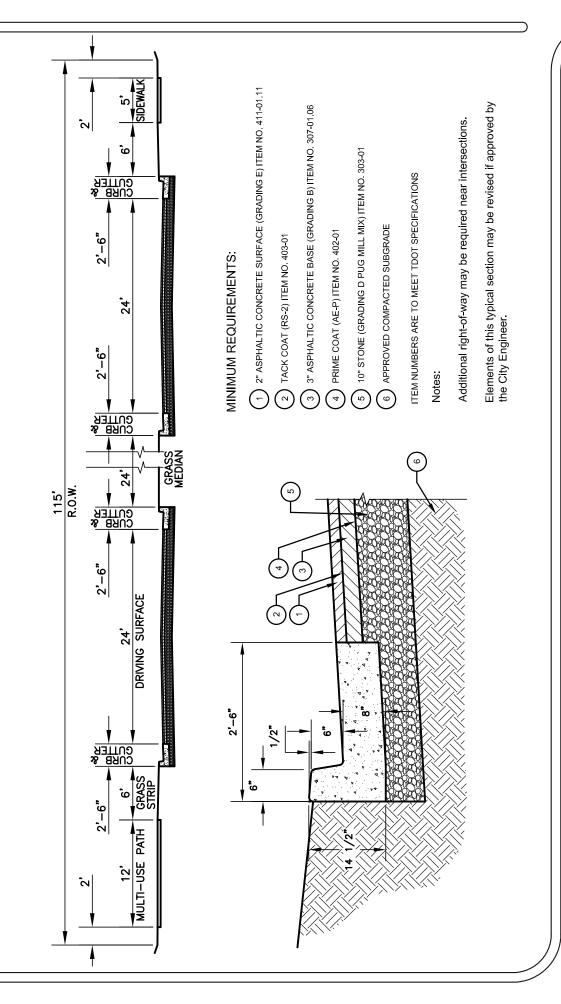
MAJOR ARTERIAL 130' R.O.W.

SLV

CITY OF COLUMBIA

DATTE 4-23-2012 DWG. NO. SD-01

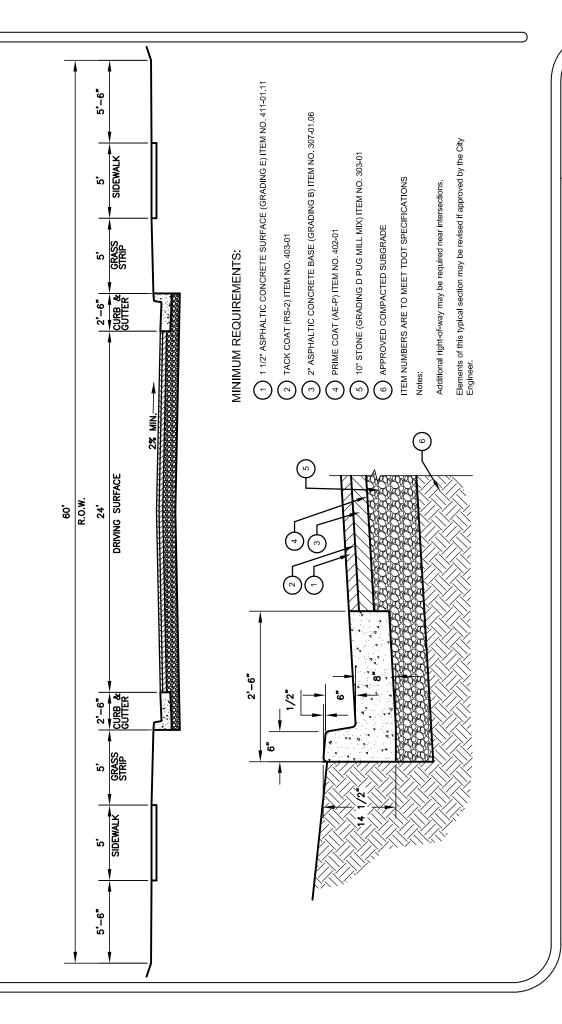




MAJOR COLLECTOR/ MINOR ARTERIAL - 115' R.O.W

CITY OF COLUMBIA

DATE 4-23-2012 DWG. NO. SD-02

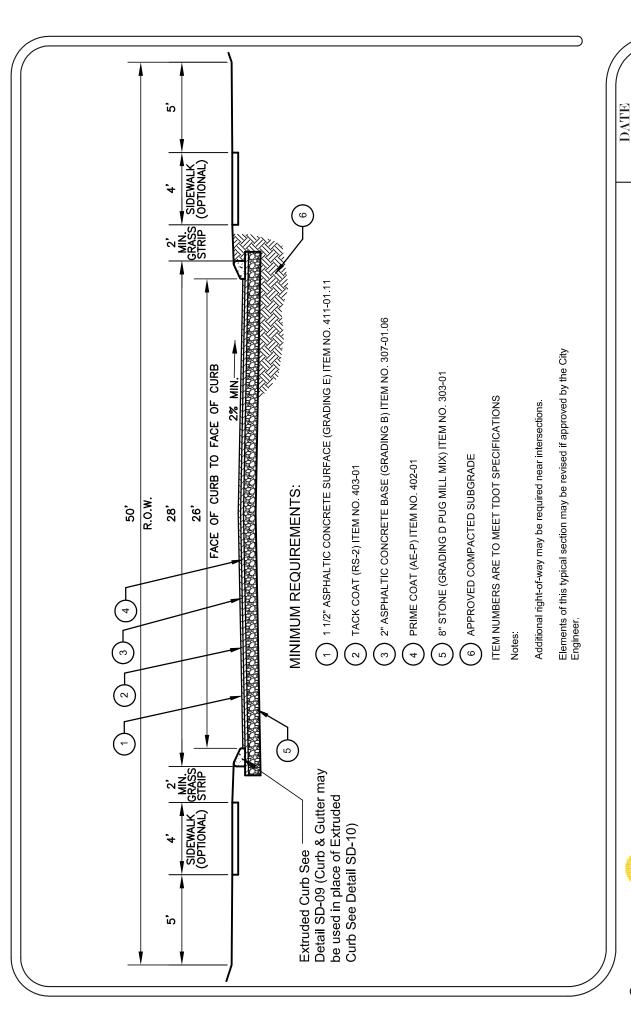


MINOR COLLECTOR

CITY OF COLUMBIA

DATE 4-23-2012

SD-03 DWG. NO.



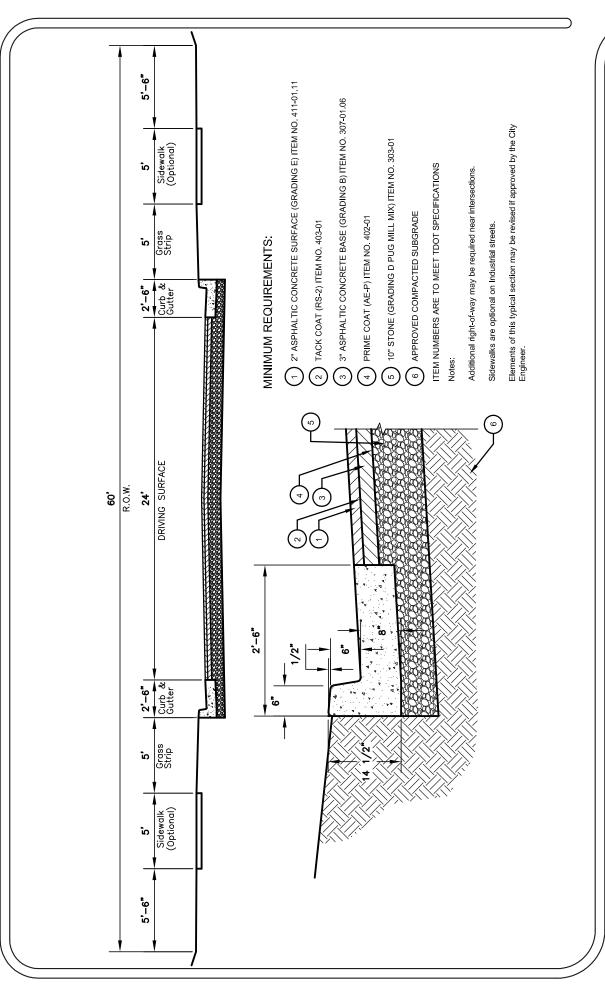
RESIDENTIAL LOCAL STREET

CITY OF COLUMBIA

DWG. NO. 4-23-2012

SD-04





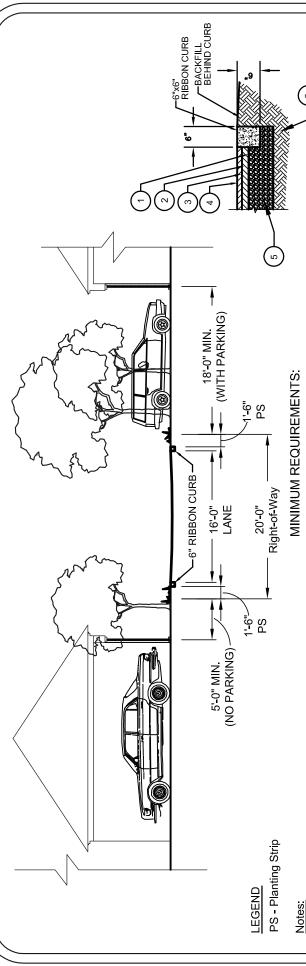
INDUSTRIAL / COMMERCIAL STREET

CITY OF COLUMBIA

DATE 4-23-2012

DWG. NO.

SD-05



Setback may be either 5' distance from right-of-way \overline{OR} 18' min. Distances between 5-18' are not allowed to discourage parking that could block alley access.

General Notes:

- Expansion joints to be spaced a maximum of 100 feet apart and align with ramps, inlets and other required target points.
- 2. Contraction/construction joints are required and are to be cut into curb every 10 feet.
- 3. The 6" ribbon curb is to be used only in special conditions such as

- 1 1/2" ASPHALTIC CONCRETE SURFACE (GRADING E) ITEM NO. 411-01.11
- 2 TACK COAT (RS-2) ITEM NO. 403-01
- 3 2" ASPHALTIC CONCRETE BASE (GRADING B) ITEM NO. 307-01.06
 - (4) PRIME COAT (AE-P) ITEM NO. 402-01
- (5) 8" STONE (GRADING D PUG MILL MIX) ITEM NO. 303-01
- (6) APPROVED COMPACTED SUBGRADE

ITEM NUMBERS ARE TO MEET TDOT SPECIFICATIONS

Notes:

Additional right-of-way may be required near intersections.

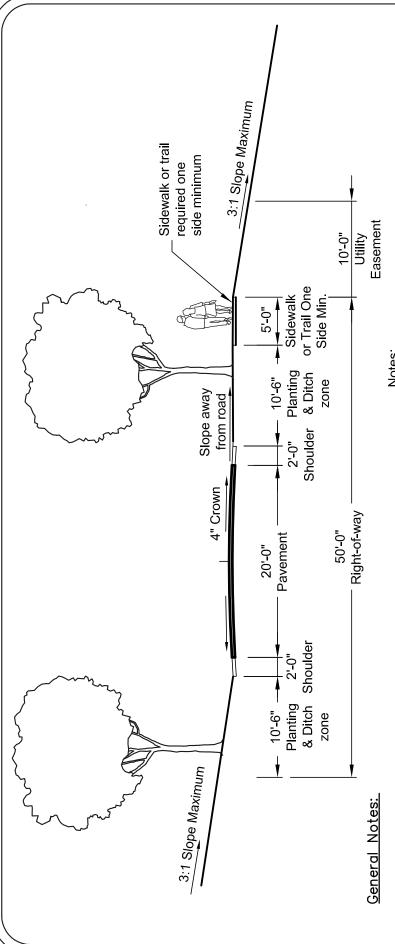
Elements of this typical section may be revised if approved by the City Engineer



STANDARD ALLEY SECTION (NTS)

CITY OF COLUMBIA

90-CS DWG. NO. 4-23-2012 DATE



1. A professional engineer licensed in the state of Tennessee is required to provide a pavement section appropriate for each specific use and conditions. Streets shall meet the standards as set forth in the latest version of the Tennessee Department of Transportation Roadway Design Guidelines. 'n

3. Streets without curbs are permitted only in conservation subdivisions or along dedicated park space.

Notes:

Additional right-of-way may be required near intersections.

Elements of this typical section may be revised if approved by the City Engineer.

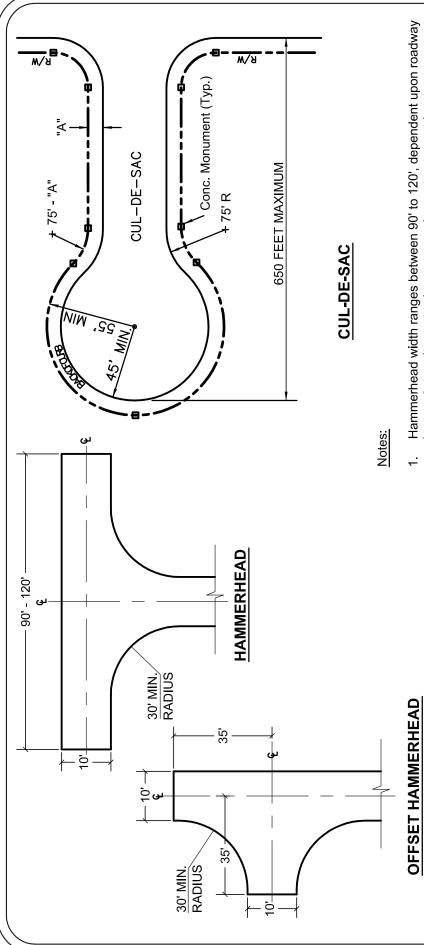


CONSERVATION STREET SECTION

CITY OF COLUMBIA

SD-07 DWG. NO.

4-23-2012 DATE



- length. Sidewalks and utilities may be located within public easements.
- Turnaround facilities cannot be located on driveways. ď

1. Cul-de-sacs shall be permitted where topographic

features or configuration of property boundaries

prevent street connections.

2. Temporary Cul-de-sacs shall be the same size as

and binder, but curbing and asphalt surface may above, and shall be constructed of base stone

be excluded.

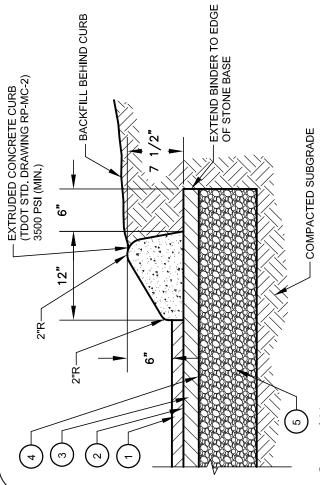
- All street ends shall be signed as required. က
- Additional right-of-way may be required near intersections. 4
- Elements of this typical section may be revised if approved by the City Engineer. 5

TURN-A-ROUND DETAI

CITY OF COLUMBIA

DWG. NO. 4-23-2012 DATE

SD-QS



- (1) 11/2" ASPHALTIC CONCRETE SURFACE (GRADING E) ITEM NO. 411-01.11
- (z) TACK COAT (RS-2) ITEM NO. 403-01
- (3) 2" ASPHALTIC CONCRETE BASE (GRADING B) ITEM NO. 307-01.06
- (4) PRIME COAT (AE-P) ITEM NO. 402-01
- (5) 8" STONE (GRADING D PUG MILL MIX) ITEM NO. 303-01

ITEM NUMBERS ARE TO MEET TDOT SPECIFICATIONS

General Notes:

- 1. Expansion joints to be spaced a maximum of 100 feet apart and align with ramps, inlets and other required target points.
- Contraction/construction joints are required and are to be cut into curb every 10 feet.
- Details shall meet the standards as set forth in the latest version of the Tennessee Department of Transportation Roadway Design Guidelines. က
- The extruded 6" mountable concrete curb is to be used only in special conditions such as low speed low volume local streets and when tying to similar curbs on subdivision streets or in parking lots. 4
- Where concrete median pavement is poured behind extruded 6" mountable concrete curb, it may be poured monolithically with the curb. 5



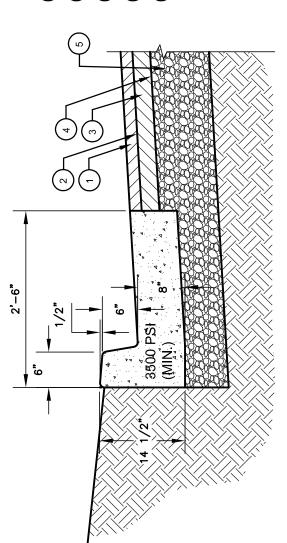
MOUNTABLE CURB DETAIL

(NTS)

CITY OF COLUMBIA

DATE 4-23-2012 DWG, NO.

SD-09



- (1) 2" ASPHALTIC CONCRETE SURFACE (GRADING E) ITEM NO. 411-01.11
- (2) TACK COAT (RS-2) ITEM NO. 403-01
- (3) 3" ASPHALTIC CONCRETE BASE (GRADING B) ITEM NO. 307-01.06
- 4 PRIME COAT (AE-P) ITEM NO. 402-01
- (5) 10" STONE (GRADING D PUG MILL MIX) ITEM NO. 303-01

ITEM NUMBERS ARE TO MEET TDOT SPECIFICATIONS

General Notes:

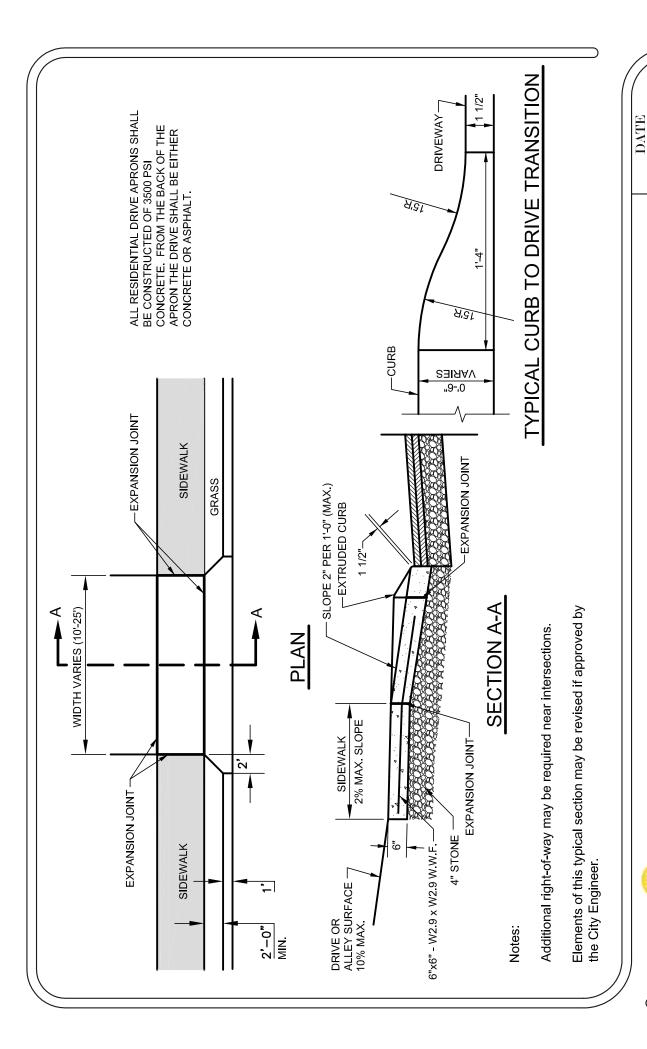
- 1. Expansion joints to be spaced a maximum of 100 feet apart and align with ramps, inlets and other required target points.
- 2. Contraction joints are required and are to be cut into curb every 10 feet.
- Tennessee Department of Transportation Roadway Design Guidelines. 3. Details shall meet the standards as set forth in the latest version of the



JURB & GUTTER SECTION

CITY OF COLUMBIA

DWG. NO. DATE 4-23-2012



DRIVEWAY APRON (RESIDENTIAL)

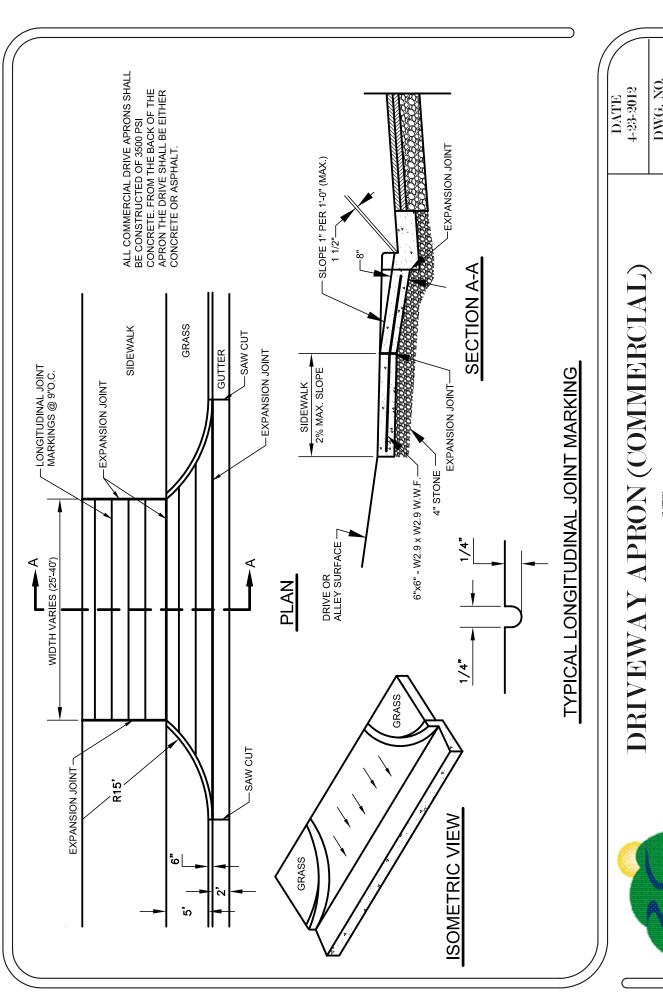
(NTS)

CITY OF COLUMBIA

4-23-2012 DWG. NO.

DWG. NO.

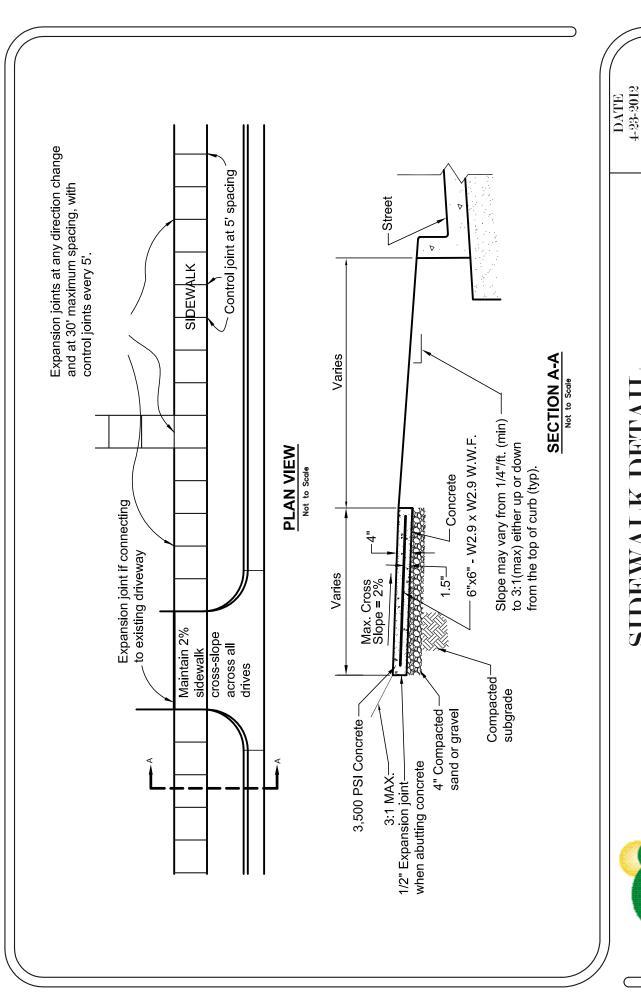




CITY OF COLUMBIA

DWG. NO.

SD-12

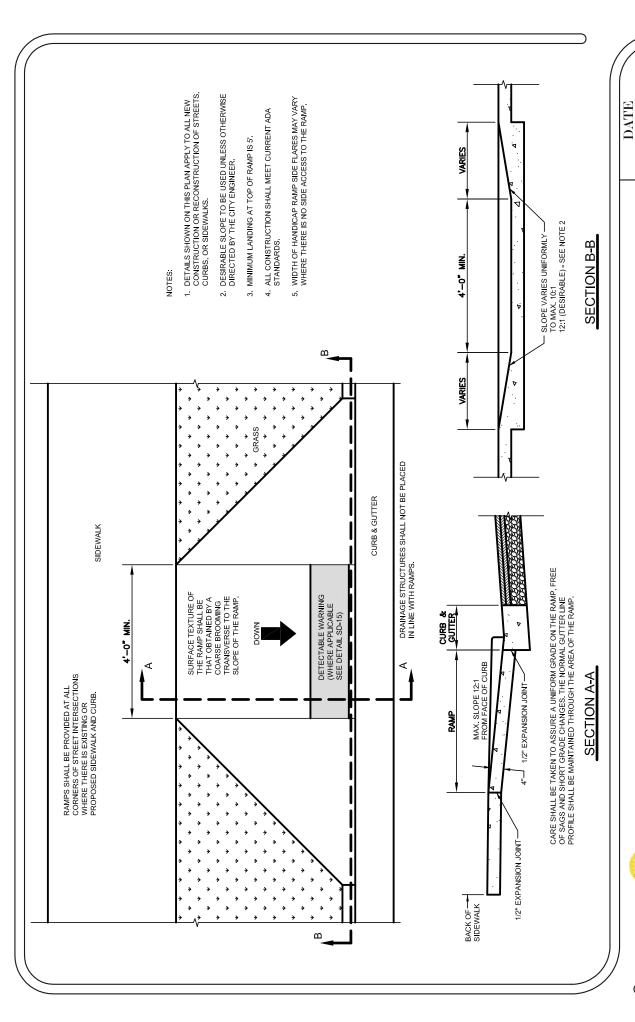




CITY OF COLUMBIA

DWG. NO.

SD-13



HANDICAP RAMP

(NTS)

CITY OF COLUMBIA

4-23-2012 DWG. NO. SD-14

2،-0، 0 0000 0 0 0 0 0 000 0 0 0 0 0 0 0 000 000 000 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 000 000 000 0 0 0 000000 0

TRUNCATED DOME PLAN VIEW

4'-0" MIN. (VARIES WITH WIDTH OF RAMP)

- 1. DETECTABLE WARNINGS SHALL BE INSTALLED PER MANUFACTURERS SPECIFICATIONS.
- WIDTH OF DETECTABLE WARNING AREA SHALL BE A MINIMUM OF 4 FEET AND VARY WITH WIDTH OF RAMP. ď
- 3. LENGTH OF DETECTABLE WARNING AREA SHALL BE 2 FEET REGARDLESS OF SECTION WIDTH.
- DETECTABLE WARNING DOMES SHALL BE ALIGNED ON A SQUARE GRID IN THE PREDOMINANT DIRECTION OF TRAVEL TO PERMIT WHEELS TO ROLL BETWEEN THE DOMES. 4
- THE MATERIAL USED TO PROVIDE CONTRAST SHALL BE AN INTEGRAL PART OF THE WALKING SURFACE. 5
- DETECTABLE WARNINGS USED ON INTERIOR SURFACES SHALL DIFFER FROM ADJOINING WALKING SURFACES IN RESILIENCY OR SOUND-ON-CANE CONTACT 9
- 7. THE MATERIAL USED TO PROVIDE CONTRAST SHOULD CONTRAST BY AT LEAST 70%. CONTRAST IN PERCENT IS DETERMINED BY:

CONTRAST = [(B1-B2)/B1] x 100

= LIGHT REFLECTANCE VALUE (LRV) OF THE DARKER AREA. (NOTE THAT IN ANY APPLICATION BOTH WHITE AND BLACK ARE NEVER ABSOLUTE: THUS, B1 NEVER EQUALS 100 AND B2 IS ALWAYS GREATER THAN 0. WHERE B1 = LIGHT REFLECTANCE VALUE (LRV) OF THE LIGHTER AREA AND B2

8. ALL MATERIALS AND WORKMANSHIP SHALL MEET CURRENT ADA REQUIREMENTS



DETECTABLE WARNING

TTY OF COLUMBIA

4-23-2012 DATE

DWG. NO.

SD-15

TABLE 1.1 - STREET DESIGN STANDARDS a, b

	ARTERIAL	IAL		COLLECTOR	R	LOCAL	AL
			MAJ	MAJOR	MINOR	COMMERCIAL	
	MAJOR	MINOR	COMMERCIAL & A INDUSTRIAL	RESIDENTIAL	RESIDENTIAL	& INDUSTRIAL	RESIDENTIAL
DESIGN SPEED/ POSTED SPEED (MPH)	50/45 MPH	45/40 MPH	40/35 MPH	40/35 MPH	35/30 MPH	30/25 MPH	30/25 MPH
RIGHT-OF-WAY ©	130 Ft.	115 Ft.	115 Ft.	115 Ft.	60 Ft.	60 Ft.	50 Ft.
NUMBER OF LANES	4-Lane Divided	4-Lane Divided	4-Lane Divided	4-Lane Divided	2-Lane	2-Lane	2-Lane
TRAFFIC LANE WIDTH	12 Ft.	12 Ft.	12 Ft.	12 Ft.	12 Ft.	12 Ft.	11 Ft.
MINIMUM HORIZONTAL CURVE RADIUS WITH NO SUPER-ELEVATION	1389 Ft.	1039 Ft.	762 Ft.	762 Ft.	510 Ft.	333 Ft.	333 Ft.
MAXIMUM GRADE	%9	7%	8%	10%	10%	8%	14%
STOPPING SIGHT DISTANCE	425 Ft.	360 Ft.	305 Ft.	305 Ft.	250 Ft.	200 Ft.	200 Ft.
"K" VALUE FOR CREST VERTICAL CURVE	84	61	44	44	29	19	19
"K" VALUE FOR SAG VERTICAL CURVE	96	79	64	64	49	37	37

- (a) See standard drawing details for sidewalk locations, curb types, inlets and alley requirements.
- (b) These dimensions may be increased or amended by the City Engineer as deemed necessary for safe and efficient street operation.
- c) Where fill or cut slopes or any other highway development must be included, additional Right-of-Way may be required.
- (d) Minimum grade on any street shall be 1.00%.
- (e) Maximum grade may be increased by the City Engineer if justified by existing conditions and assurance that the ease of access for emergency and service vehicles is received by appropriate City Staff.

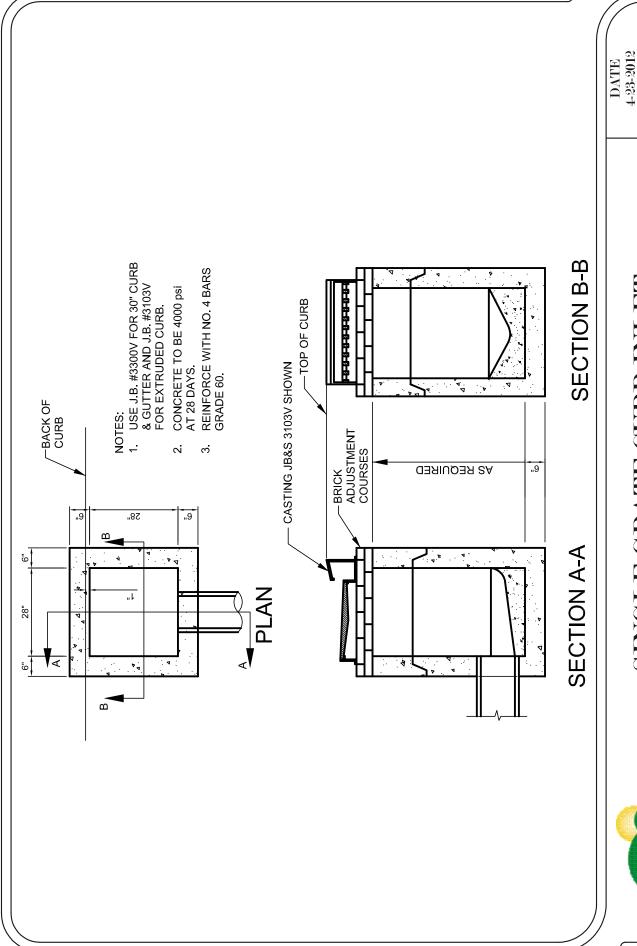


STREET DESIGN STANDARDS (NTS)

CITY OF COLUMBIA

4-23-2012 DATE

DWG. NO.

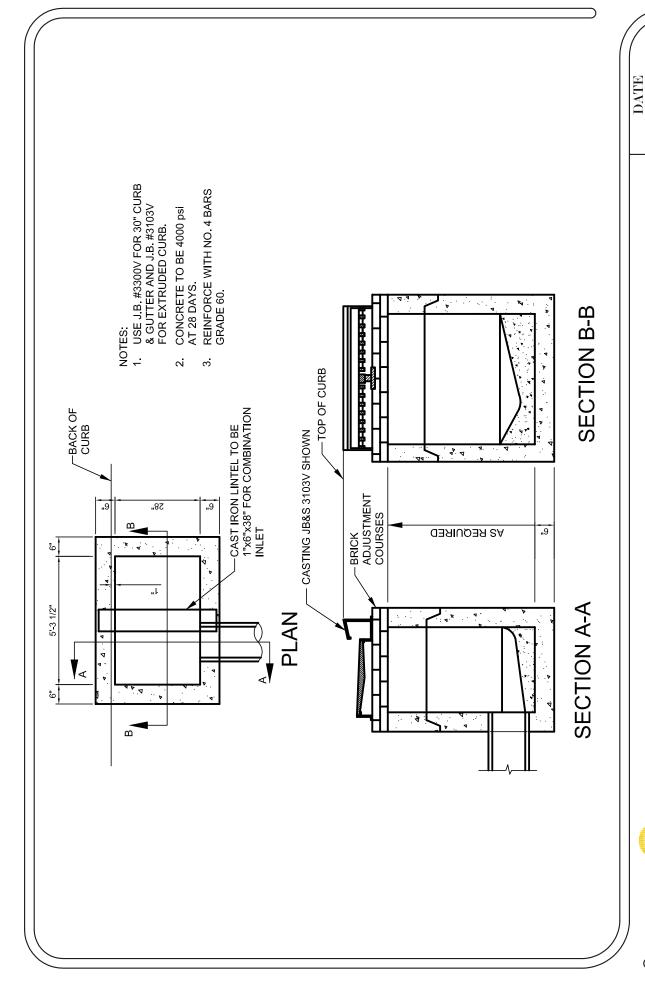


SINGLE GRATE CURB INLET

CITY OF COLUMBIA

DWG. NO. DD-01



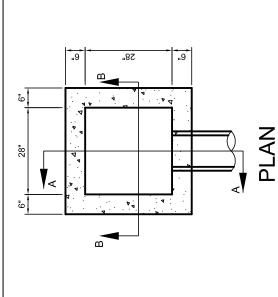


DOUBLE GRATE CURB INLET

CITY OF COLUMBIA

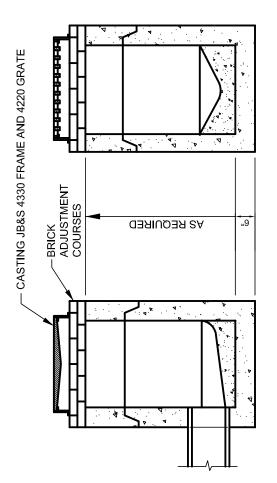
DD-05 DWG. NO.

4-23-2012



- NOTES: 1. CASTING SHALL BE JOHN BOUCHARD 4330 FRAME AND 4220 GRATE OR APPROVED EQUIVALENT.
- CONCRETE TO BE 4000 psi AT 28 DAYS. 2

REINFORCE WITH NO. 4 BARS GRADE 60. က



SECTION A-A

SECTION B-B

AREA DRAIN

CITY OF COLUMBIA

DWG. NO. DATE 4-23-2012





DATE

4-23-2012	DWG. NO.	DD-04
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	T _(MIN)	9	9	9	9	9	9	9	9
SIONS	Ь	1'-9"	1'-9"	1'-9"	3'-3"	3'-3"	4'-5"	4'-5"	4'-5"
TABLE OF DIMENSIONS	Е	2'-6"	2'-6"	2'-6"	3'-6"	3'-6"	3'-6"	4'-0"	4'-0"
OF D	D	5'-0"	5'-0"	5'-0"	6'-6"	.9-,9	8'-0"	8'-0"	8'-0"
ABLE	٧	2'-6"	2'-6"	2'-6"	4'-0"	4'-0"	2'-6"	2'-6"	2'-6"
Τ	PIPE SIZES	15"	18"	21"	24"	30"	36"	42"	48"

Э

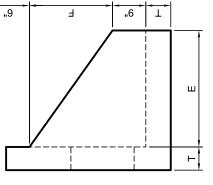
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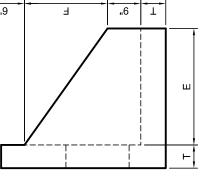
PLAN

<u>"</u>9

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SIDE ELEVATION

FRONT ELEVATION

CONCRETE: 4000 PSI AT 28 DAYS

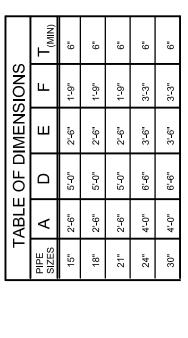
REINFORCED WITH NO. 4 BARS 10" C-C EACH WAY WITH WINGS AND TOE SLAB DOWELLED TO HEADWALL WITH NO. 5 BARS

3/4" CHAMFER ON ALL EXPOSED EDGES

CONCRETE ENDWALL







3

Τ

<u>"</u>9



12"x6"x12" H. ENERGY DISSIPATORS

PLAN

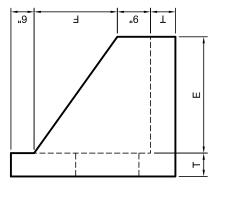
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SIDE ELEVATION

REINFORCED WITH NO. 4 BARS 10" C-C EACH WAY WITH WINGS AND TOE SLAB DOWELLED TO HEADWALL WITH NO. 5 BARS

CONCRETE: 4000 PSI AT 28 DAYS

FRONT ELEVATION

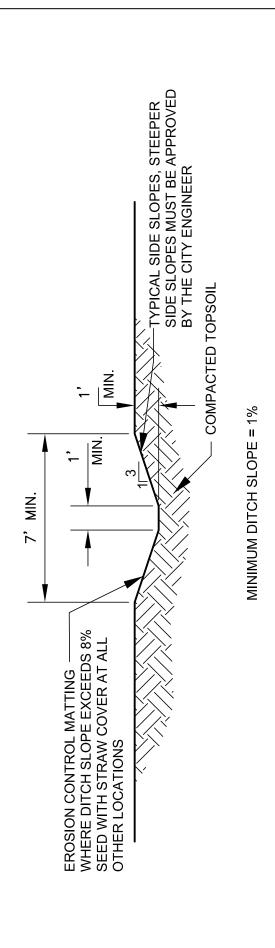
3/4" CHAMFER ON ALL EXPOSED EDGES

WITH ENERGY DISSIPATION (NTS) CONCRETE ENDWA

CITY OF COLUMBIA

DD-02 DWG. NO. DATE 4-23-2012



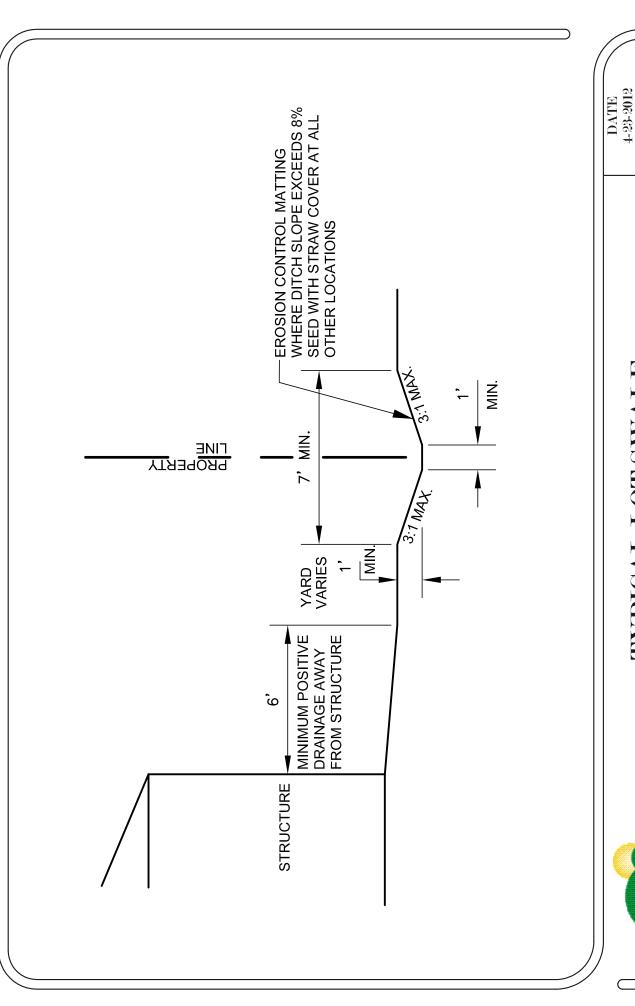


TRAPEZOIDAL DITICH SECTION (NTS) CITY OF COLUMBIA

DWG. NO. DD-06

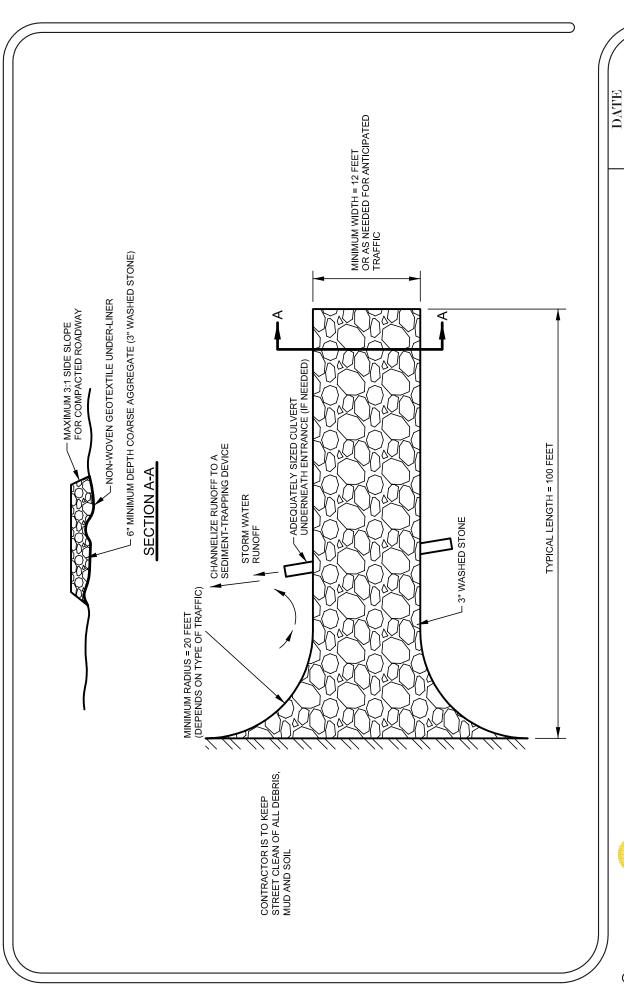
DATE 4-23-2012





TYPICAL LOT SWALE (NTS) CITY OF COLUMBIA

70-CC DWG. NO.

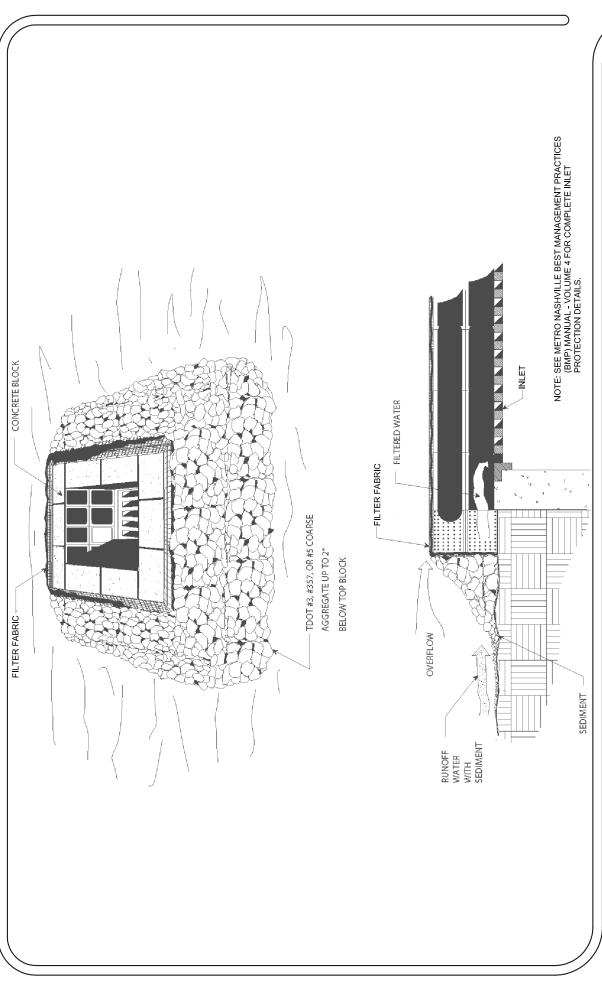


CONSTRUCTION ACCESS

CITY OF COLUMBIA

DWG. NO.

4-23-2012



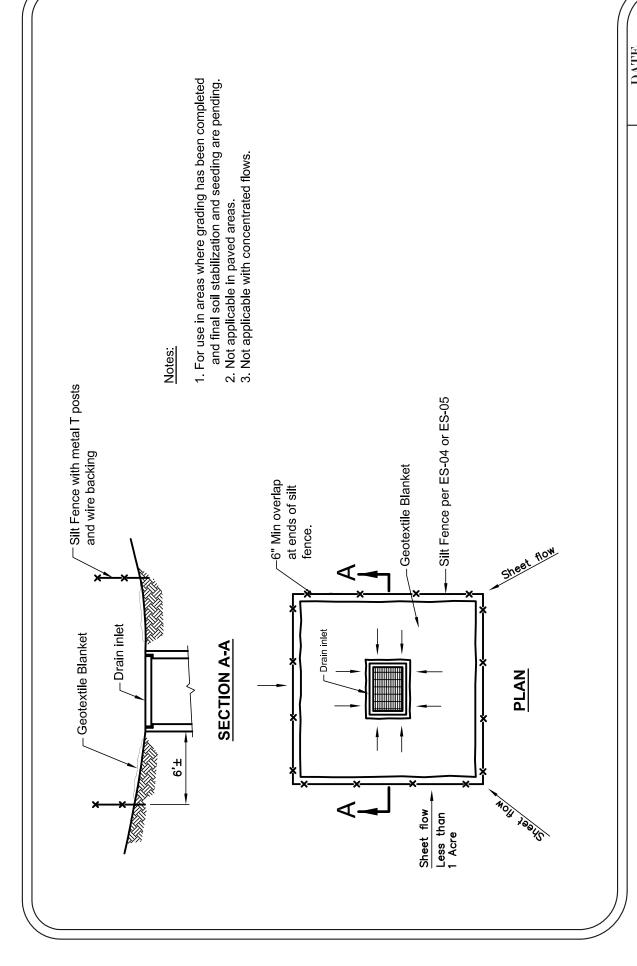
INLET PROTECTION

CITY OF COLUMBIA

4-23-2012DATE

DWG. NO.

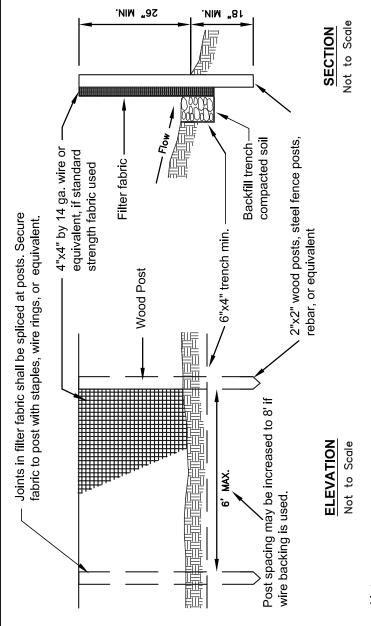




AREA DRAIN INLET PROTECTION

CITY OF COLUMBIA

DWG. NO. DATE 4-23-2012



Notes:

- 1. Silt fencing is used to intercept small amounts of sediment and reduce velocity from sheet flow only.
- placed at the specified anchor depth and simultaneously filling the fence fabric into the trench as the trench is 2. Static Slicing is the preferred method of installation and involves the insertion of a narrow cutting blade, being excavated.
- 3. Filter fabric fences shall be installed along ground contour with the end of the row turned upslope.
- 4. Maintenance shall be preformed as needed: Sediment shall be removed from behind the silt fence when it has accumulated to 1/3 the original height of the structure or if bulges develop in the silt fencing.



SILTATION CONTROL FENCE

(NTS)

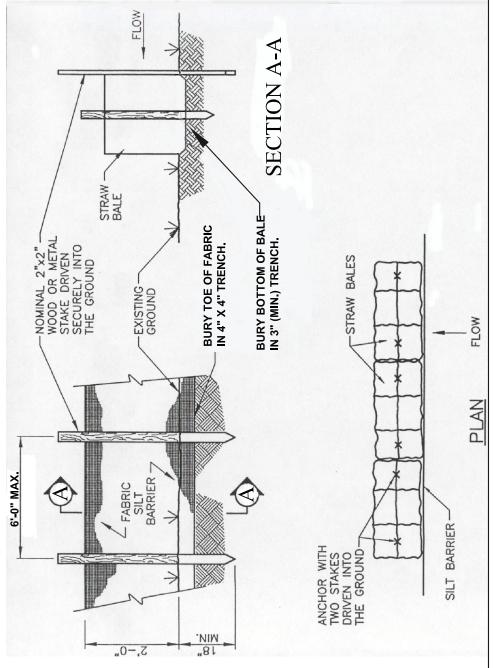
SITY OF COLUMBIA

+23-2012 DWG. NO. ES-04

DATE

NOTES:

) This detail is to be used along creeks, streams, rivers and wet weather conveyances .





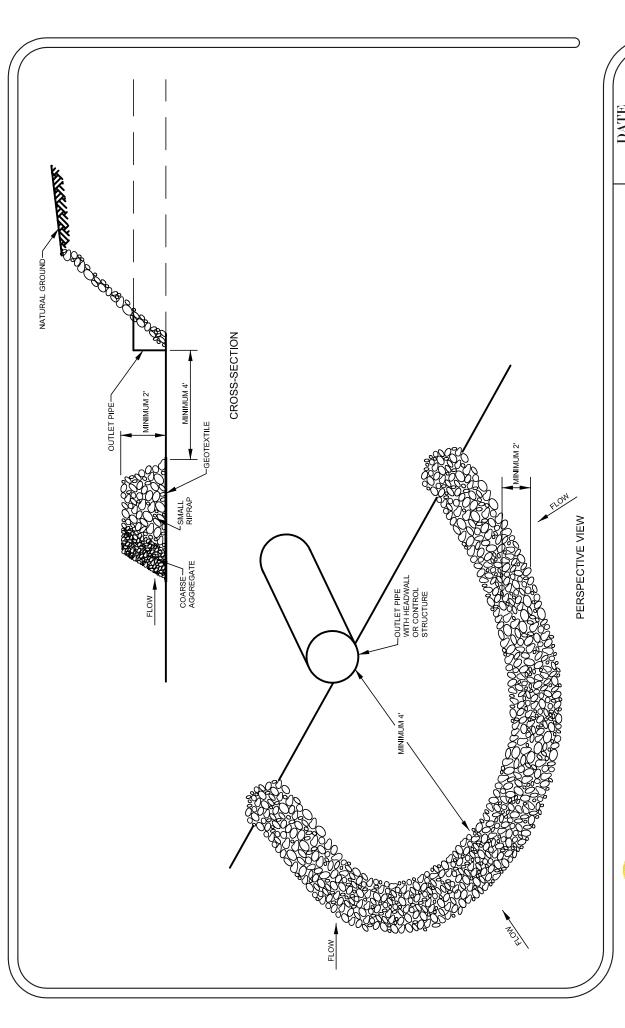
COMBINATION SILTATION BARRIER

(NTS)

CITY OF COLUMBIA

DATE 4-23-2012

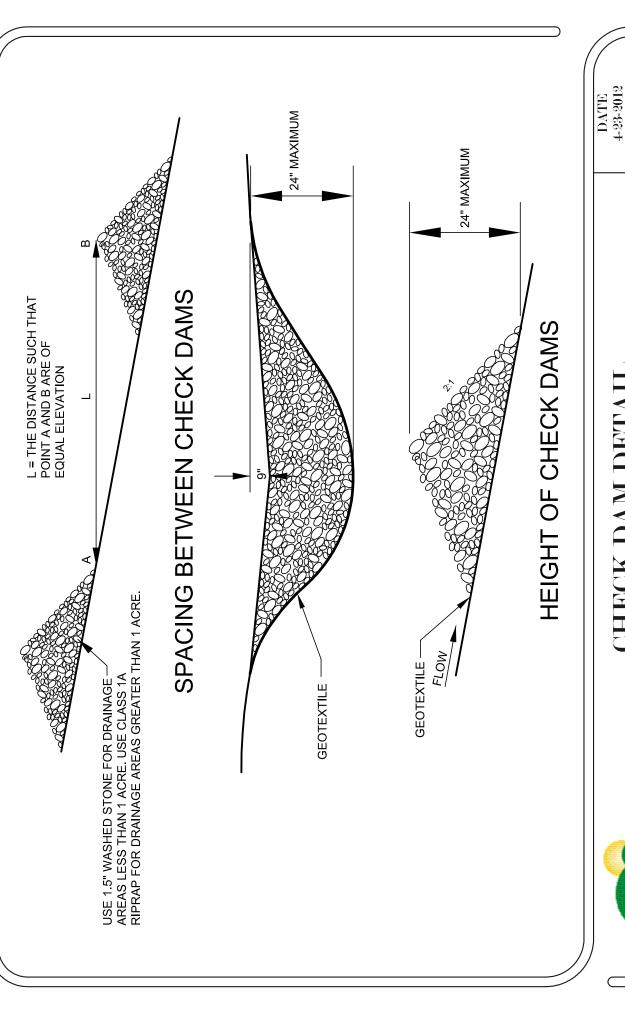
DWG. NO.



STONE FILTER RING CITY OF COLUMBIA

DATE 4-23-2012

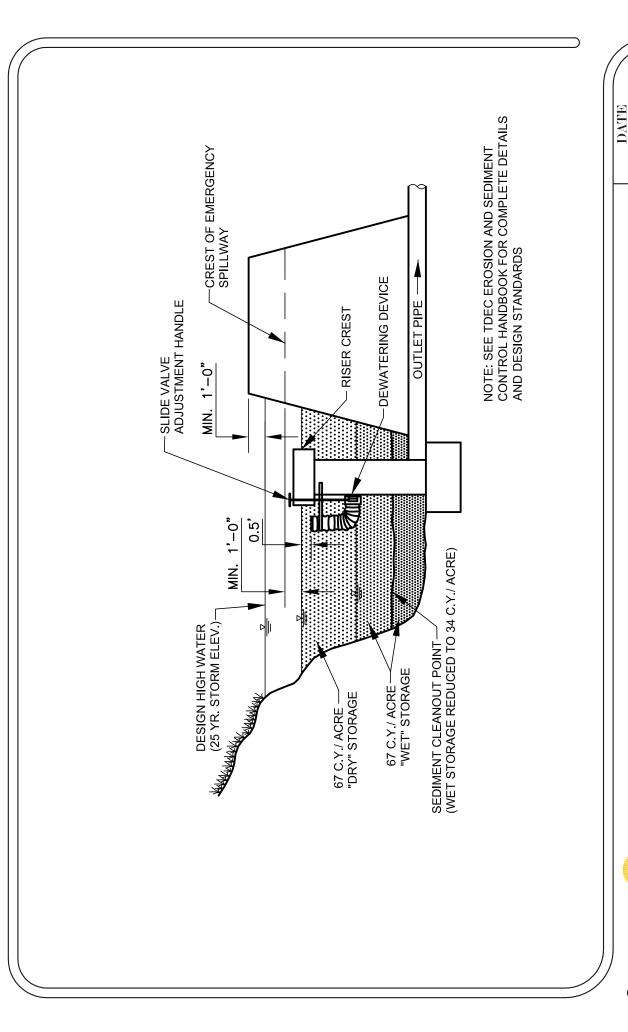
DWG. NO. ES-06



CHECK DAM DETAIL

CITY OF COLUMBIA

ES-07 DWG. NO.



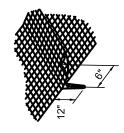
SEDIMENT BASIN DETAIL

CITY OF COLUMBIA

DWG. NO. 4-23-2012



TAMP THE SOIL FIRMLY. STAPLE AT 12" INTERVALS ACROSS THE NET. END OF THE NET IN 12" DEEP TRENCH. ANCHOR SLOT: BURY UP-CHANNEL



ANCHOR SLOT, LEAVING 6" OVERLAP. ROLL 18" AND TURN THE END OF THE **UP-CHANNEL END OF THE PREVIOUS** ROLL OF NET IN A TRENCH, AS WITH PREVIOUS ROLL, JUST BELOW THE JOINING STRIPS: INSERT THE NEW THE ANCHOR SLOT. OVERLAP THE



FIRMLY. STAPLE AT 12" INTERVALS ACROSS THE NET. LAY THE NET SMOOTHLY ON THE CHECK SLOTS: ON ERODIBLE SOILS OR STEEP SLOPES CHECK SLOTS SHOULD BE SURFACE OF THE SOIL - DO NOT STRETCH MADE EVERY 15 FEET. INSERT A FOLD OF THE NET, AND DO NOT ALLOW WRINKLES. THE NET INTO A 6" TRENCH AND TAMP

ON SHALLOW SLOPES, STRIPS OF NETTING MAY BE APPLIED ACROSS THE SLOPE.

OF NETTINNG PARALLEL TO THE DIRECTION OF FLOW AND ANCHOR SECURELY. ON STEEP SLOPES, APPLY STRIPS

INTERVALS ALONG THE ANCHOR END OF

THE NET

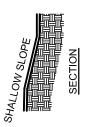
SLOT ON THE UP-CHANNEL SIDE OF THE

TAMP FIRMLY. ROLL THE NET UP THE

CHANNEL. PLACE STAPLES AT 12"

STRUCTURE. FILL THE TRENCH AND

ANCHORING ENDS AT STRUCTURES: PLACE THE ENDS OF THE NET IN A 12'



OVERLAP OVERLAP THE EDGES OF EVERY 12" DOWN THE CENTER OF THE STRIPS AT LEAST 4". STAPLE THE STRIP.



SECTION



WHERE THERE IS A BERM AT THE TOP OF THE SLOPE, BRING THE MATTING OVER THE BERM AND ANCHOR IT BEHIND THE BERM WITH A 12" ANCHOR TRENCH.

> DESIGN ENGINEER TO SPECIFY TYPE OF BLANKET/MATTING TO BE USED

END UNDER 6" AND STAPLE AT 12" INTERVALS.

TERMINATING THE INSTALLATION, TURN THE BRING NETTING DOWN TO A LEVEL BEFORE

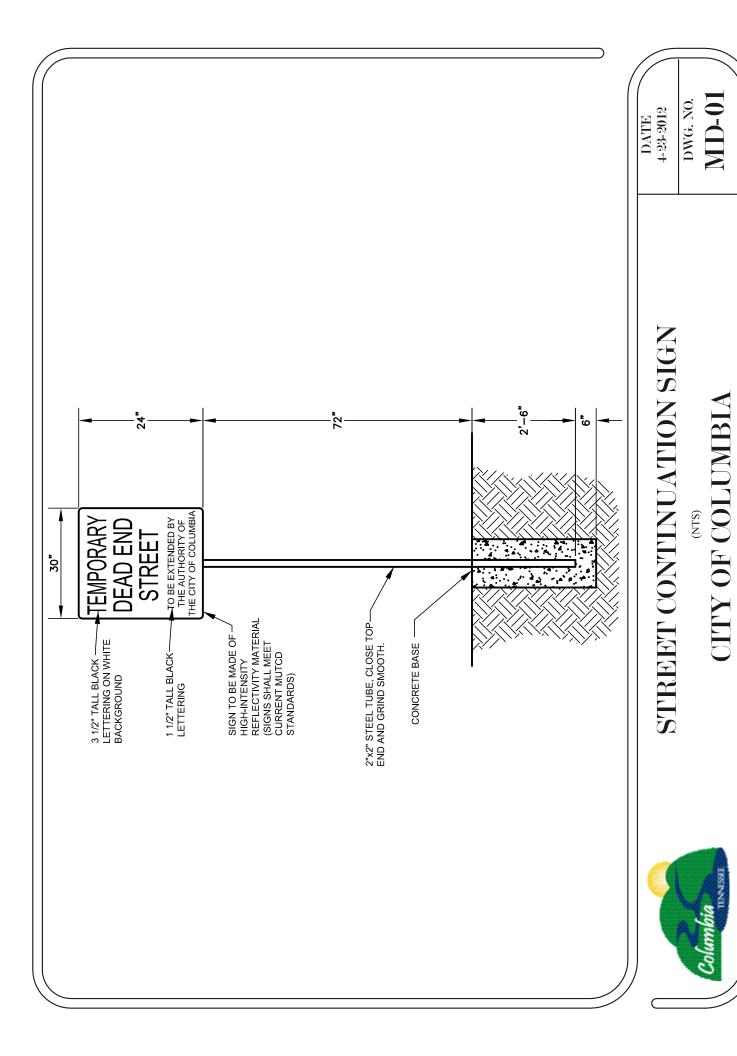


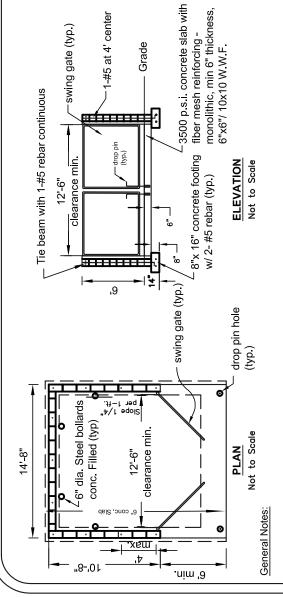
SLOPE STABILIZATION

TITY OF COLUMBIA

4-23-2012 DATE

DWG. NO.





- 1. Materials, construction and quantity control of masonry shall be in accordance with International Building Code
- Materials used should be consistent with those used in the construction of and architectural style of the principal building.
- CONCRETE SLAB: Monolithic, min. 6" thickness w/imbedded 6"x6"/ 10x10 welded wire fabric (W.W.F.), 3500
 P.S.I. with fiber mesh reinforcing.
- CONCRETE FILLED CELLS: With 1-#5 vertical rebar tied to footer steel at each corner and every 4' O.C.

4

- GATES: Constructed of min. 1-1/2" diameter galvanized tubular steel w/privacy-type slats inserted in galvanized steel mesh fabric, hinge-mounted on min. 3" diameter galvanized steel post. (Gates and post constructed and installed per applicable building code by licensed fence contractor). 2
- DROP PIN: 1/2" dia. 18" long metal rod gate latch. Provide 3/4" dia. hole 6" into concrete for rods. In asphalt provide a 3/4" P.V.C. sleeve, 6" long, or equal.
- 7. SOIL:Soil bearing capacity to be at least 2,500 P.S.F.
- BOLLARD: 3'-6" high, 6" diameter steel pipe bollard filled with concrete, painted traffic yellow, imbedded 3'-0"
 deep in 18" concrete foundation.

CONCRETE MASONRY WALL CONSTRUCTION

Materials, construction and quantity control of masonry shall be in

accordance with International Building Code (IBC). General conditions and construction requirements shall be applied as specified in the IBC during grouted masonry work.

1. All reinforcing steel shall be deformed bars conforming to ASTM A-615,

- All reinforcing steel shall be deformed bars conforming to ASTM A-615, Grade 60. Vertical reinforcement shall be placed in the center of the masonry cell, and shall be held in position at the top and bottom.
- If a slab dowel does not line-up with a vertical core, it shall not be sloped more than one horizontal in six verticals (1:6).
 Horizontal wall reinforcement shall be standard truss type DUR-O-WALL

(or equivalent) at 16" o.c.

- Hollow Load-bearing Concrete Masonry Units shall be normal weight conforming to ASTM C-90, with a minimum compressive strength of a conforming
- Mortar shall be type M or S, in accordance with ASTM C-270. Place all masonry in running bond with 3/8" mortar joints. Provide complete coverage face shell mortar bedding, horizontal and vertical.
- Coarse grout shall conform to ASTM C-476, with a maximum aggregate size of 3/8", 8" to 10" slump, and a minimum compressive strength of 2,500 PSI at 28 days.
- Minimum 3" X 3" clean-out holes (saw-cut) are required at the bottom course of all cells to verify grout placement. Clean-outs shall be sealed after masonry inspection-provided in accordance with ACI 531-4.6, and before grouting.
- 8. Prior to grouting, the grout space shall be clean, with no mortar projections greater the ½", mortar droppings or other foreign material. All cells shall be in vertical alignment, and shall solidly be filled with coarse grout as specified.
- During placing, grout shall be consolidated with flexible cable vibrator.
 First grout pour shall be stopped a minimum of 1 1/2" below the top of the middle bond beam masonry.



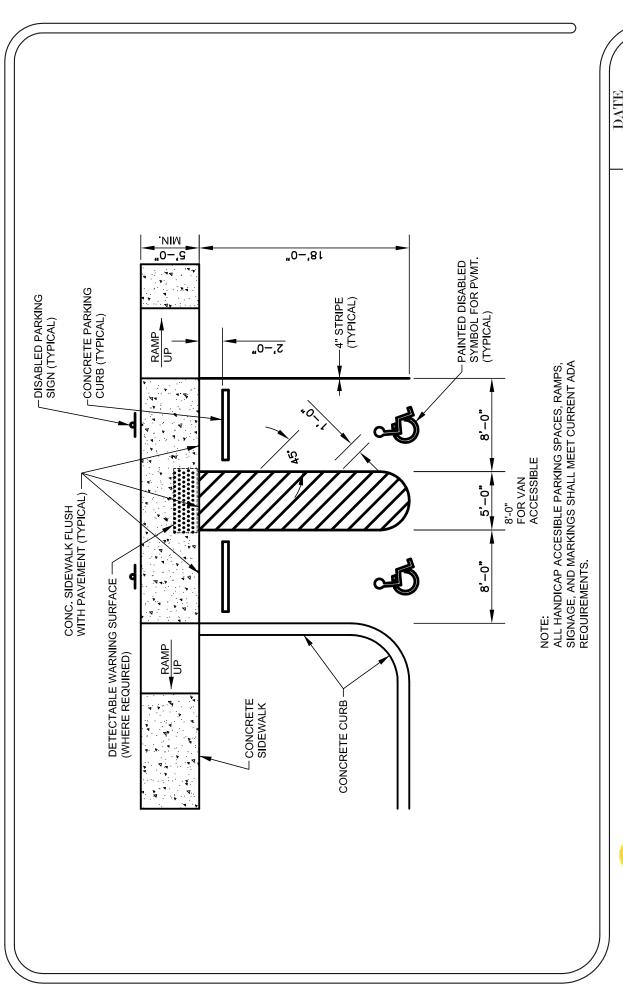
DUMPSTER PAD & ENCLOSURE

(NTS)

ITY OF COLUMBIA

DATE 4-23-2012 DWG. NO.

MD-02

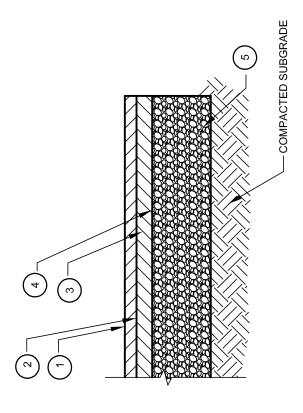


HANDICAP PARKING & RAMP DETAIL CITY OF COLUMBIA



DWG. NO. 4-23-2012

MD-03



MINIMUM STANDARDS

- $\left(\begin{array}{cc}1\end{array}
 ight)$ 11/2" ASPHALTIC CONCRETE SURFACE (GRADING E) ITEM NO. 411-01.11
- (2) TACK COAT (RS-2) ITEM NO. 403-01
- (3) 2" ASPHALTIC CONCRETE BASE (GRADING B) ITEM NO. 307-01.06
- $\begin{pmatrix} 4 \end{pmatrix}$ PRIME COAT (AE-P) ITEM NO. 402-01
- (5) 6" STONE (GRADING D PUG MILL MIX) ITEM NO. 303-01

ITEM NUMBERS ARE TO MEET TDOT SPECIFICATIONS



PARKING LOT PAVEMENT SECTION

(NTS)

CITY OF COLUMBIA

DATE 4-23-2012 DWG. NO.

Distance from public way measured in feet	113'	150'	300,	.368	440'	,095	.092	1130'	1500'	2230'	,0008
Letter size measured in inches.	4"	9	6	15"	.14"	18"	.77	.98	48"	.22	96

- 1. Property address shall be issued by the Engineering Department at the time the building permit is issued.
- 2. New and existing buildings shall have approved address numbers, building numbers, or approved building identification placed in a position plainly legible and visible from the street or road fronting the property. These numbers shall contrast with their background. Address numbers shall be Arabic numerals or alphabet letters. Numbers shall be a minimum of 4 inches (102 m) high with a minimum stroke width of 0.5 inch (12.7mm).
- 3. All commercial structures shall be addressed in accordance with the latest edition of the International Building Code that is adopted by The City of Columbia.
- 4. All residential structures shall have the property address posted on the structure and both sides of the mail box if it exists.
- 5. Under extenuating circumstances the City of Columbia may alter/change existing addresses in order to ensure the safety and well being of the citizens of Columbia.



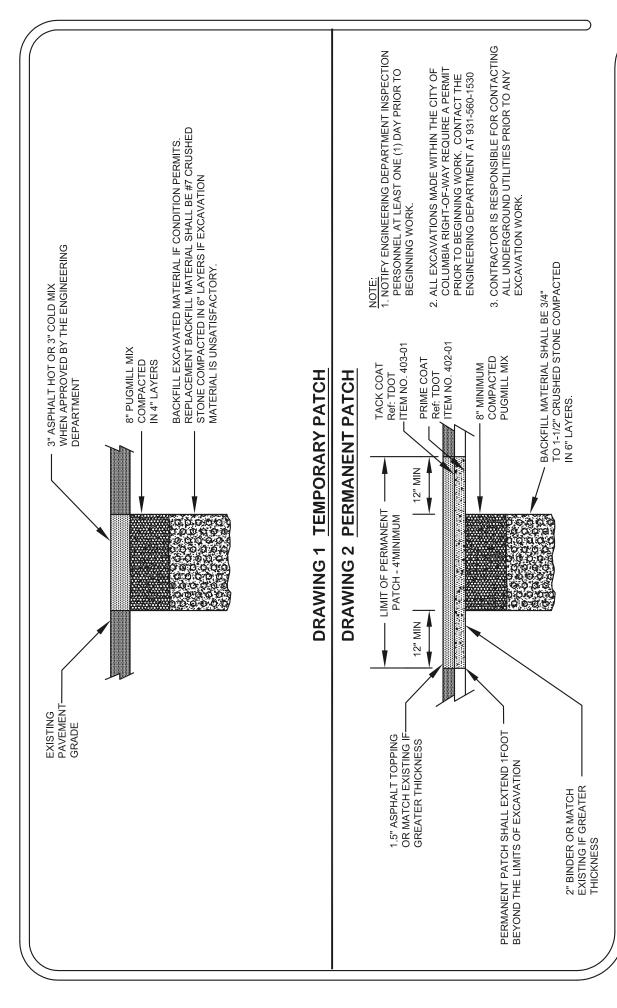
PROPERTY ADDRESSES

SLN)

CITY OF COLUMBIA

DATE 4-23-2012 DWG. NO.

DWG. NO. MID-05



STREET CUT REPAIR

SITY OF COLUMBIA

4-23-2012 DATE

DWG. NO.

90-CIM



DATE 4-23-2012

DWG. NO. PD-01

TYPICAL SUBDIVISION ENTRANCE FEATURE CITY OF COLUMBIA



TYPICAL CITY OF COLUMBIA STANDARD IS DARK GREEN MAST ARM AND SIGNAL POLE WITH BLACK SIGNAL BACKGROUND

MAST ARM FOR TRAFFIC SIGNALS

CITY OF COLUMBIA

DATE 4-23-2012

PD-02 DWG. NO.





STANDARD STREET LIGHT (NTS) CITY OF COLUMBIA

DWG. NO. PD-03 DATE 4-23-2012



DATE 4-23-2012

DWG. NO. PD-04

TYPICAL MAIL BOX
(NTS)
CITY OF COLUMBIA





DWG. NO. PD-05 DATE 4-23-2012

TYPICAL STOP SIGN (NTS) CITY OF COLUMBIA





SUBDIVISION REGULATIONS

CITY OF DICKSON TENNESSEE

SUBDIVISION REGULATIONS CITY OF DICKSON, TENNESSEE

ADOPTED: June 17, 2008

LAST AMENDED: January 18, 2011

PREPARED FOR THE DICKSON MUNICIPAL PLANNING COMMISSION

Donnie Faulkner, Chairman
David Adams
Linda Chambers
Mike Legg
Mike Petty
Bob Rail
Judy White

DEPARTMENT OF ECONOMIC AND COMMUNITY DEVELOPMENT LOCAL PLANNING ASSISTANCE OFFICE

SUITE 128

446 METROPLEX DRIVE

NASHVILLE, TENNESSEE 37211-3139

TELEPHONE: (615) 741-1534 FAX: (615) 532-1896

TABLE OF CONTENTS

ARTICLE I	GENERAL PROVISIONS	<u>Page</u>
1-101 1-102 1-103 1-104 1-105 1-106 1-107 1-108 1-109 1-110 1-111 1-112 1-113	Title Authority Jurisdiction Policy and Purpose Interpretation, Conflict and Severability Saving Provision Amendments Resubdivision of Land Conditions Vacation of Plats Variances Enforcement, Violation, and Penalties Repeal of Previous Regulations	I-1 I-1 I-1 I-2 I-3 I-4 I-5 I-5 I-5 I-6 I-7 I-11
ARTICLE II	PROCEDURES FOR PLAT APPROVAL	
2-101 2-102 2-103 2-104 2-105	General Procedure Sketch Plat (Major Subdivisions Only) Preliminary Plat (Major Subdivisions Only) Final Subdivision Plat (Minor and Major Subdivision) Signing and Recording of Subdivision Plat	II-1 II-7 II-8 II-10 II-12
ARTICLE III	ASSURANCE FOR COMPLETION AND MAINTENANCE OF IMPROVEMENTS	
3-101 3-102 3-103 3-104 3-105 3-106	Improvements and Performance Bond Inspection of Improvements Maintenance of Improvements Deferral or Waiver of Required Improvements Escrow Deposits for Lot Improvements Issuance of Building Permits and Certificates of Occupancy	III-1 III-3 III-3 III-4 III-4 III-5
ARTICLE IV	REQUIREMENTS FOR IMPROVEMENTS, RESERVATIONS, AND DESIGN	
4-101 4-102 4-103 4-104 4-105 4-106 4-107 4-108 4-109 4-110 4-111 4-112 4-113	General Requirements Lot Requirements Streets and Driveways Private Streets Drainage and Storm Sewers Water Facilities Sewage Facilities Pedestrian Ways Utility Easements Public Uses Preservation of Natural Features and Amenities Nonresidential Subdivisions Street Lighting	IV-1 IV-3 IV-9 IV-14 IV-18 IV-19 IV-20 IV-21 IV-22 IV-22 IV-23

ARTICLE V	SPECIFICATIONS FOR DOCUMENTS TO BE SUBMITTED	
5-101 5-102 5-103 5-104 5-105	Sketch Plat Preliminary Plat Construction Plans Final Plat Form of Dedication Offer	V-1 V-1 V-4 V-6 V-12
ARTICLE VI	DEFINITIONS	
6-101 6-102	Usage Words and Terms Defined	VI-1 VI-1
ARTICLE VII	ADOPTION OF REGULATIONS AND AMENDMENTS	
7-101	Original Enactment	VII-1
APPENDICES		
APPENDIX A	FORMS	
Form Number 2 Form Number 3	Preliminary Plat Checklist Final Plat Checklist Performance Bond Irrevocable Documentary Letter of Credit	3 5 7 10
APPENDIX B	ROAD DESIGN STANDARDS AND CONSTRU SPECIFICATIONS	ICTION
SECTION I	GENERAL DESIGN STANDARDS	
	 A. Design Speeds B. Intersections C. Dead End Streets D. Right-of-Way E. Pavement Widths and Crown F. Maximum Roadway Grades G. Horizontal Curves H. Vertical Curves I. Drainage System Design J. Bridges K. Guardrail L. Permits M. As-Built Drawings 	12 13 13 14 14 14 15 16 17 17
	N. Standard Roadway Sections	18
SECTION II		

MATERIALS SPECIFICATION AND CONSTRUCTION PROCEDURES, cont'd

	F. Sidewalks	48
APPENDIX C	FIRE HYDRANT CLASSIFICATION AND COLOR CODE SCHEME	
	A. Classification of Hydrants B. Marking of Hydrants	52 52

AMENDMENTS

<u>DATE</u>	RESOLUTION	<u>AMENDMENT</u>
May 18, 2010	2010-1	Addition of new section in Article IV, Section 4-113, <u>Street Lighting</u> ; addition of new language in Article V, Section 5-103.2, #8
January 18, 2011	2011-1	Addition of new section in Article IV, Section 4-103.4, Roadway Classification and Pavement Design; addition of new language in Article IV, Section 4-112.2, #2; addition of new definition in Article VI, Section 6-102, Minor Collector Street; modifications of roadway widths and asphalt mixtures to illustrations in APPENDIX B, ROADWAY DESIGN STANDARDS AND CONSTRUCTION SPECIFICATIONS, N. STANDARD ROADWAY SECTIONS

ARTICLE I

GENERAL PROVISIONS

1-101 Title

These regulations shall hereinafter be known and cited as the Subdivision Regulations, of Dickson, Tennessee.

1-102 Authority

These subdivision regulations are adopted by the Dickson Municipal Planning Commission (hereinafter referred to as "Planning Commission"), in pursuance of the authority and powers granted by Sections 13-4-301 through 13-4-308, Tennessee Code. Having adopted a major street or road plan for the jurisdictional area, and filed a certified copy of the plan with the County Register of Deeds (hereinafter referred to as "county register"), as required by Sections 13-4-302, Tennessee Code, and having held a public hearing as indicated in Section 7-101, of these regulations, and as required by Section 13-4-403, Tennessee Code, the Planning Commission has fulfilled the requirements set forth in state law as prerequisites to the adoption of these regulations.

1-103 <u>Jurisdiction</u>

These subdivision regulations shall apply to all subdivisions, as herein defined, located within the City of Dickson municipal limits. No land shall be subdivided within the planning region until the subdivider submits a plat as required by these regulations, obtains Planning Commission approval of the plat, and files the approved plat with the county register.

1-104 Policy and Purpose

It is hereby declared to be the policy of the Planning Commission to consider the subdivision of land and development of a subdivision plat as subject to the control of the adopted land use or community development plan (hereinafter referred to as "land development plan") of the jurisdictional area for orderly, planned, and efficient physical and economical development.

Land to be subdivided shall be of such character that it can be used for building purposes without danger of health, fire, flood, or other menace.

Land shall not be subdivided until proper provisions have been made for drainage, water, sewerage, other public utilities, and for other required public services. The existing and proposed public improvements shall generally conform to and be properly related to the proposals shown in the land development plan.

These regulations are adopted for the following purposes:

A. To promote the public health, safety, and general welfare of the jurisdictional area.

- B. To guide the development of the jurisdictional area in accordance with the land development plan, considering the suitability of nonresidential and public areas and having regard for the most beneficial land use in such areas.
- C. To provide for adequate light, air, and privacy; to secure safety from fire, flood, and other dangers; and to prevent overcrowding of the land and undue congestion of population.
- D. To enhance the character and economic stability and encourage the orderly, beneficial development of the jurisdictional area.
- E. To conserve the value of land, buildings, and improvements throughout the jurisdictional area and to minimize detrimental conflicts among the uses of land and structures.
- F. To guide public and private policy and action providing for transportation, water, sewerage, schools, recreational areas, and other public requirements and facilities.
- G. To provide for the most beneficial relationship between the uses of land and buildings and the efficient traffic movement throughout the jurisdictional area.
- H. To establish reasonable standards of design and procedures for subdivisions and resubdivisions; to further the orderly layout and use of land; and to insure proper legal descriptions and proper monumenting of land.
- I. To insure that public facilities are available and will have a sufficient capacity to serve the proposed subdivision.
- J. To prevent the pollution of air, streams, and ponds; to assure the adequacy of drainage facilities; to safeguard the water table; and to preserve the integrity, stability, beauty, and value of the jurisdictional area.
- K. To preserve the natural beauty and topography of the jurisdictional area, and to insure appropriate development with regard to these natural features.
- L. To provide for open spaces through efficient design and layout of the land, including the use of average density in providing for minimum width and area of lots, while preserving the density of land as established in any zoning ordinance.
- M. To encourage subdivision design which would maximize the conservation of all forms of energy.

1-105 Interpretation, Conflict, and Severability

1-105.1 Interpretation

These regulations shall be held to be the minimum requirements for the promotion of health, safety, and general welfare.

1-105.2 Conflict with Public and Private Provisions

1-105.201 <u>Public Provisions</u>

These regulations are not intended to interfere with, abrogate, or annul any other ordinance, rule, or regulation, statute, or other provision of law. Where any provision of these regulations imposes restrictions different from those imposed by any other ordinance, rule, regulation, or other provision of law, whichever provisions are more restrictive or impose higher standards shall control.

1-105.202 Private Provisions

These regulations are not intended to abrogate any easement, covenant, or any other private agreement or restriction; provided, that where these regulations are more restrictive or impose higher standards than such easement, covenant, or other private agreement or restriction, the requirements of these regulations shall govern.

Where any private provision exceeds the standards set forth herein, such shall be considered a private contract between the parties of interest, and as such is beyond the jurisdiction of the Planning Commission.

1-105.3 Severability

If any part or provision of these regulations or application thereof to any person or circumstances is adjudged invalid by any court of competent jurisdiction, such judgment shall be confined in its operation to the part, provision, or application directly involved in the controversy in which such judgment shall have been rendered and shall not affect or impair the validity of the remainder of these regulations or the application thereof to other persons or circumstances. The Planning Commission hereby declares that it would have enacted the remainder of these regulations without any such part, provision, or application.

1-106 <u>Saving Provision</u>

These regulations shall not be construed as abating any action now pending under, or by virtue of prior subdivision regulations; or as discontinuing, abating, modifying, or altering any penalty accruing or about to accrue; or as affecting the liability of any person; or as waiving any right of the Planning Commission under any section or provision existing at the time of adoption of these regulations; or as vacating or annulling any rights obtained by any person by lawful action of the Planning Commission, except as expressly provided otherwise in these regulations.

1-106.1 Previously Approved Subdivisions

1-106.101 <u>Unexpired Preliminary Approval</u>

The approval granted on any plat prior to the effective date of these regulations shall remain in force and effect for the time period stipulated by the regulations under which the approval was first granted.

In any instance in which the period of preliminary approval shall have passed with some portion of the subdivision not having received final approval, and the applicant wishes an extension of the preliminary approval, the Planning Commission may:

- permit the remaining portion of the subdivision to be constructed and to receive approval under provisions set forth in the regulations whereby preliminary approval was originally granted, or
- (2) stipulate that the plat is null and void and that a new plat be presented subject to the provisions of these regulations.

In making this determination, the Planning Commission shall consider all pertinent facts available to it. The current state and active pursuit of construction and development activities within the subdivision shall be given due consideration in the course of the Planning Commission's deliberation on this question.

1-107 Amendments

1-107.1 **Enactment**

For the purpose of providing for the public health, safety, and general welfare the Planning Commission may from time to time amend these regulations. Before the adoption of any amendment to these regulations, a public hearing thereon shall be held by the Planning Commission, as required by Chapter 3, Title 13, <u>Tennessee Code</u>, the time and place of which shall be given in a newspaper of general circulation.

1-107.2 Codification and Distribution

Subsequent to the adoption of any amendment to these regulations, such amendment shall be incorporated into the text of these regulations in the following manner.

- 1. Replacement pages shall be prepared incorporating the new or changed language. Each such new or replacement page shall have the amendment number and shall be dated so as to indicate the date of the last revision of the page.
- 2. In Article VII, of these regulations, each adopted amendment shall be numbered consecutively and printed on pages separate from

any other amendment and in a manner which fully states any language deleted from these regulations and any language added and the place in the text of each such change.

1-108 Resubdivision of Land

1-108.1 <u>Procedures for Resubdivision</u>

If any change in an approved or recorded subdivision plat would affect the layout of any public street, alley, or road (hereinafter referred to as public way) shown on such plat, or area reserved thereon for public use, or any lot line, or if it would affect any map, plan, or plat legally recorded before the adoption of any subdivision regulations, such amendment shall be approved by the Planning Commission by the same procedure, rules, and regulations as for a subdivision.

1-108.2 <u>Procedures for Subdivision Where Future Resubdivision Is</u> <u>Foreseen</u>

Whenever a parcel of land is subdivided and the subdivision plat shows one or more lots containing more than one acre of land or double the minimum required area for any zoning district in which the lot is located, and the Planning Commission has reason to believe that any such lot(s) will be resubdivided into smaller building sites, the Planning Commission may require that the subdivision and development of such parcel of land allow for the future opening of public ways and the ultimate extension of adjacent public ways. The Planning Commission may also require that dedications providing for the future opening and extension of such public ways be indicated on the plat.

1-109 Conditions

Regulation of the subdivision of land and the attachment of reasonable conditions to land subdivision are exercises of valid police power delegated by the state to the Planning Commission. The developer has the duty of compliance with reasonable conditions imposed by the Planning Commission for design, dedication, improvement, and restrictive use of the land so as to provide for the physical and economical development of the jurisdictional area and for the safety and general welfare of future plot owners in the subdivision and of the community at large.

1-110 Vacation of Plats

Any plat or any part of any plat may be vacated by the owner of the premises, at any time before the sale of any lot described therein, by a written instrument, to which a copy of such plat shall be attached, declaring the plat or part of the plat to be vacated. The Planning Commission shall follow the same procedure for approval of plats. The Planning Commission or City Council may reject any such instrument which abridges or destroys any public rights in any of its public uses, improvements, or public ways. Such an instrument shall be executed, acknowledged, or approved, and duly recorded or filed; the instrument shall operate to void the recorded plat and divest all public rights in the public ways and public grounds and all dedications laid out or described in such plat. When any lot or lots have been sold the plat may be vacated in the manner herein

provided only if all of the owners of lots in such platted area join in the execution of such writing.

1-111 <u>Variances</u>

1-111.1 **General**

If the Planning Commission finds that extraordinary hardships or practical difficulties may result from strict compliance with these regulations, a variance from these regulations may be granted; provided, such variance shall not have the effect of nullifying the general intent and purpose of these regulations and provided, further, that the Planning Commission shall not recommend variations unless it shall make findings based upon written evidence presented to it in each specific case that:

- 1. the granting of the variance will not be detrimental to the public safety, health, or welfare, or be injurious to other property or improvements in the neighborhood in which the property is located;
- 2. the conditions upon which the request for a variance is based are unique to the property for which the variance is sought and are not applicable generally to other property;
- 3. because of the particular physical surroundings, shape, or topographical condition of the specific property involved, a particular hardship (not self-imposed) to the owner would result, as distinguished from a mere inconvenience, if the strict letter of these regulations were carried out; and
- 4. the variance will not in any manner alter the provisions of the land development plan, the major street or road plan, or any zoning ordinance.

Where the Planning Commission concludes that the purpose of these regulations may be specifically served to an equal or greater extent by an alternative proposal, condition, or circumstance, it may approve other variations to these regulations.

1-111.2 Procedures

Each and every variance or modification of these subdivision regulations sought by a subdivider shall be specifically applied for in the numerical order of the subdivision regulations, in writing by the subdivider in letter form. Any condition shown on the plat which would require a variance or modification shall constitute a grounds for disapproval of the plat unless such special application for modification variance is made. In approving any variation from these regulations the Planning Commission shall state fully in the minutes the grounds for the variation and all of the facts upon which the decision is made.

1-111.3 Conditions

In approving variations, the Planning Commission may impose such conditions as in its judgment will secure substantially the objectives, standards, and requirements of the regulations.

1-112 Enforcement, Violation, and Penalties

1-112.1 **General**

1-112.101 **Authority**

The enforcement of these regulations and the penalties for violations are provided pursuant to Title 13, Tennessee Code.

1-112.102 Enforcing Officer

It shall be the duty of the Building Official (hereinafter referred to as "the enforcing officer)" to enforce these regulations and to bring to the attention of legal council any violations or lack of compliance herewith.

1-112.103 Recording of Plats

Pursuant to Section 13-4-402, <u>Tennessee Code</u>, no plat of a subdivision of land within the jurisdictional area shall be received or recorded by the county register until the plat has received final approval of the Planning Commission in accordance with these regulations, and such approval has been endorsed in writing on the plat by the Planning Commission secretary in the manner prescribed by Section 2-105, of these regulations.

The description by metes and bounds in the instrument of transfer or other document used in the process of selling or transfer shall not exempt any owner or agent violating the provisions of the preceding paragraph from the penalties or remedies provided in Subsections 1-112.2 and 1-112.3, of these regulations.

1-112.104 Use of Unapproved Plats

Pursuant to Section 13-4-306, <u>Tennessee Code</u>, no owner or agent of the owner of any land shall convey such land contrary to the provisions stated herein.

The description by metes and bounds in the instrument of transfer or other document used in the process of selling or transfer shall not exempt any owner or agent violating the provisions of the preceding paragraph from the penalties or remedies provided in Subsections 1-112.2 and 1-112.3, of these regulations.

1-112.105 Metes and Bounds Subdivisions

The subdivision of any lot or parcel of land by use of metes or bounds description without complying with the plat provisions of these regulations shall not be permitted. All such described subdivisions shall be subject to all of the requirements of these regulations.

1-112.106 <u>False Statements About Roads</u>

Pursuant to Section 13-4-306 <u>Tennessee Code</u>, no owner or agent of the owner of any land shall falsely represent to a prospective purchaser of real estate that roads or streets will be built or constructed by any city, county, or any other political subdivision.

1-112.107 Public Ways and Utilities

Pursuant to Section 13-4-307, <u>Tennessee Code</u>, the Planning Commission shall not nor shall any public authority accept, lay out, open, improve, grade, pave, or light any public way, lay or authorize the laying of water mains or sewers, or construct or authorize the construction of other facilities or utilities in any public way located within the jurisdictional area unless such way shall have been accepted, opened, or otherwise received the legal status of a public way prior to the attachment of the Planning Commission's jurisdiction, or unless such way corresponds in its location and lines to a way shown on a subdivision plat approved by the Planning Commission or on a public way plat made by the Planning Commission.

In case of any state highway constructed or to be constructed within the jurisdictional area with state funds as a part of the state highway system, the submission to the Planning Commission shall be by the Tennessee Commissioner of Transportation, who shall have the power to overrule the disapproval of the Planning Commission.

1-112.108 Building Permits

No building permit shall be issued for the construction of any building or structure located on a lot or plat subdivided or sold in violation of any provision of these regulations.

1-112.109 Access to Lots by Public Way or Private Easement

Pursuant to Section 13-4-308, <u>Tennessee Code</u>, no building permit shall be issued and no building or structure shall be erected on any lot within the jurisdictional area, unless the public way giving access to the lot upon which the building or structure is proposed to be placed shall have been accepted or opened or shall have otherwise received the legal status of a public way as provided by law, or unless such lot fronts upon a permanent easement which conforms to the provisions set forth in these regulations.

Provided, further, that when a permanent easement to a public way is used as access to a lot or tract of land having been or being separated by deed or plat from other property, said easement shall

meet the following minimum requirements and any special conditions attached by the Planning Commission:

- a. A permanent easement used for access to a lot or tract of land shall be at least fifty (50) feet in width, for the entire distance, from the public way to the lot or tract being served. The Planning Commission may require greater widths if necessary to meet special conditions present on a plat;
- b. A permanent easement providing legal access to more than one lot shall be improved to meet the road construction standards established in the general requirements and minimum standards and development prerequisites to final approval sections of these regulations. This requirement does not apply when a permanent easement is providing access to one or more tracts of land that contain twenty-five (25) acres or more per tract, for the purpose of agriculture use. Any owner/developer subdividing a tract or tracts of land into parcels smaller than twenty-five (25) acres each that are located on a permanent easement shall improve that easement to meet the road construction standards of these regulations;
- c. Permanent easement improvements shall be maintained by the developer/owner by a legally established home owners association or other similar group approved by the Planning Commission. The legal documents establishing the easement and ensuring maintenance of the easement shall be submitted with the final plat for review and approval and shall be recorded with the final plat;
- d. If, at any future date, a permanent easement is submitted for acceptance as a public street or road, it shall be submitted to the Planning Commission for approval. In considering the easement for approval as a public street or road, the Planning Commission shall require the improvements to the easement to meet the minimum street construction standards in effect at the time the request for public acceptance is made.

The above section shall not be construed to prohibit the development of buildings on lots or tracts with permanent access provided by private ways when such development is in the form of condominium ownership of such private improvements which have been approved by the Planning Commission and will be in private ownership and control in perpetuity.

1-112.2 Penalties for Violations

1-112.201 Recording of Unapproved Plats

No county register 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, <u>Tennessee Code</u>, and any county register so doing shall be deemed guilty of a misdemeanor, punishable as other misdemeanors as provided by law. Any county register, receiving, filing or recording a plat of a subdivision in violation of Subsection 1-112.103, of these regulations, shall be deemed guilty of a violation of the above cited provision of the Tennessee Code.

1-112.202 Use of Unapproved Plats

Section 13-4-306, <u>Tennessee Code</u>, 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 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 city through its city attorney may enjoin such transfer or sale or agreement by action of injunction.

1-112.203 Illegal Buildings

Any building or structure erected or to be erected in violation of the subdivision regulations shall be deemed an unlawful building or structure; and the building official or other official designated by the chief legislative body may bring action or enjoin such erection or cause it to be vacated or removed as provided in Section 13-4-308, Tennessee Code.

1-112.3 Civil Enforcement

1-112.301 General

Appropriate actions and proceedings may be taken in equity to prevent any violation of these regulations, to prevent unlawful construction, to recover damages; to restrain, correct, or abate a violation, or to prevent illegal occupancy of a building, structure, or premise; these remedies shall be in addition to the penalties described in Subsection 1-112.2, of these regulations.

1-112.302 Specific Statutory Remedies

a. <u>Use of Unapproved Plats</u> -- The Planning Commission, through its attorney or other official designated by the Planning Commission, the City Council through its attorney or other official designated by the City Council, may enjoin by action for injunction any transfer of, sale of, or agreement to sell any land in violation of Subsection 1-112.104, of these regulations.

- b. <u>Erection of Unlawful Buildings</u> Where any building or structure is erected or being erected on any lot in violation of the road or easement frontage requirements of Subsection 1-112.109, of these regulations, the city building official or the city attorney or other official designated by the City Council may bring action to enjoin such erection or cause the building or structure to be vacated or removed.
- c. <u>Enforcement of Bonds</u> -- Where a bond is accepted in lieu of completion of subdivision improvements and utilities as provided in Article III, of these regulations, the city shall enforce such instrument in the manner prescribed by ARTICLE III, of these regulations.

1-113 Repeal of Previous Regulations

Upon the adoption and effective date of these regulations, the Subdivision Regulations of Dickson, Tennessee, adopted January, 1990, as amended, are hereby repealed.

ARTICLE II

PROCEDURES FOR PLAT APPROVAL

2-101 General Procedure

2-101.1 Plat Approval Requirements

Before any contract is executed for the sale of any parcel of land which is proposed to be subdivided and before any permit for the erection of any structure in a proposed subdivision shall be granted, the subdividing owner or his authorized agent shall apply for and secure the Planning Commission's approval of the proposed subdivision in accordance with the procedures of this article.

2-101.2 <u>Classification of Subdivisions</u>

The Planning Commission shall classify each subdivision proposal as either major or minor as defined herein.

2-101.201 Review Procedure

The subdivider shall follow the procedure described below in order to secure plat approval.

a. Minor Subdivision

- (i) Preapplication conference with the enforcing officer including submittal of a scale drawing or survey of the proposed subdivision for preliminary discussion and review.
- (ii) Securing of approvals from other public agencies and any affected utility districts or companies.
- (iii) Submittal of a final plat, prepared, in accordance with the specifications in Section 5-104, herein, for approval by the Planning Commission.
- (iv) When a subdivision divides a tract into no more than two lots and does not involve any street, permanent easement or public utility construction to serve such lot(s), the approval may be endorsed in writing on the plat by the secretary of the Planning Commission upon certification by the enforcing officer that the subdivision complies in all respects with these regulations and all other adopted ordinances and policies of the governing body; provided, further, that no request for a variance from these regulations or of

any other adopted ordinances or policies has been requested or will be required as a result of said approval.

(v) Any person authorized to endorse approval in writing on the final plat, as provided in Subsection 2-101.201, (a), (iv), herein may refuse to endorse approval of the plat and request consideration of the plat by the Planning Commission at the next regularly scheduled meeting of the body.

b. Major Subdivision

- (i) Preapplication conference on the subdivision with the relavent city staff that make recommendations to the Planning Commission.
- (ii) Submittal of a sketch plat, prepared in accordance with Section 5-101, herein, for Office of Planning and Zoning approval.
- (iii) Submittal of a preliminary plat, prepared in accordance with Section 5-102, herein, for Planning Commission approval.
- (iv) Securing of approval from other public agencies.
- (v) Submittal of the final subdivision plat, prepared in accordance with Section 5-104, herein, for Planning Commission approval.

2-101.3 Official Submission Date

For the purpose of these regulations the date of the regularly scheduled meeting of the Planning Commission at which the final subdivision plat is first reviewed by the Planning Commission shall be the official submittal date of the plat at which the statutory period required in Section 13-4-304, Tennessee Code, shall begin for formal approval or disapproval.

2-101.4 Policy on Flood Prone Areas

In determining the appropriateness of land subdivision at any site containing a flood prone area, the Planning Commission, in reviewing any plat, shall consider the policy and purpose set forth in Section 1-104, of these regulations and, additionally:

- 1. the danger to life and property due to the increased flood heights or velocities, either potential or actual, caused by subdivision fill, roads, and intended uses;
- 2. the danger that intended uses or improvements may be swept onto other lands or downstream to the injury of others;

- 3. the adequacy of proposed water supply, sanitation, and drainage systems, and the ability of these systems to function under flood conditions;
- 4. the susceptibility of the proposed facility and its contents to flood damage and the effect of such damage upon the individual owner;
- 5. the importance of the services provided by the proposed facility to the community at large;
- 6. the requirements of the subdivision for a waterfront location;
- 7. the availability of alternative locations not subject to flooding for the proposed subdivision and land uses;
- 8. the compatibility of the proposed uses with existing development or development anticipated in the foreseeable future;
- 9. the relationship of the proposed subdivision to the land development plan and the floodplain management program for the area;
- 10. the safety of access to the property for emergency vehicles in times of flood:
- 11. the expected heights, duration, velocity, rate of rise, and sediment transport of the floodwaters expected at the site;
- 12. the costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems, public ways, and bridges;
- 13. the effect of the proposed subdivision upon the Planning Commission's participation in the National Flood Insurance Program, if such Planning Commission is, or elects to be, in the program;
- 14. the compliance of the proposed subdivision with minimum requirements of the National Flood Insurance Program (NFIP) as regulated by the Federal Emergency Management Agency (FEMA) in order to maintain the City's status within the program.

In cases where a base flood elevation with a delineated floodway is not shown the subdivider shall prepare a report, with the assistance of a licensed engineer as necessary, on any proposed subdivision containing or abutting a floodprone area. Such report shall estimate the discharge of the regulatory flood; calculate the expected water surface elevations resulting from the regulatory flood discharge; determine the specific flooding threat at the site of the proposed subdivision; and indicate whether the subdivision is located in a floodway or floodway fringe area by:

- calculation of water surface elevations and regulatory flood protections based upon a hydraulic analysis of the capacity of the stream channel and overbank areas to convey the regulatory flood;
- 2. computation of the floodway required to convey the regulatory flood without increasing natural flood heights of the regulatory flood more than one (1) foot at any point; and
- 3. unless otherwise established, computation of increase in flood heights caused by any encroachment based upon the reasonable assumption that there will be an equal degree of encroachment on both sides of the stream within that reach. No increase in flood elevation attributable to encroachments on the floodplain of any river or stream shall be permitted in any one reach or for the cumulative effect of several reaches.

In cases in which a blueline stream crosses a roadway or any portion of a lot located within the subdivision and such steam has a drainage area of 40 acres or more a flood study as outlined above shall be conducted and submitted to the Planning Commission for review.

No subdivision or part thereof shall be approved by the Planning Commission if proposed levees, fills, structures, or other features within the subdivision will individually or collectively, increase flood flows, heights, duration, or damages. The regulatory limits (the one hundred-year flood level) shall be determined from the latest approved flood study for the jurisdictional area, and any subsequent revisions thereto. Specific engineering studies are to be formulated by the developer in those areas in which flood data are not currently available. Additional studies may be required by the Planning Commission.

In any instance in which the Planning Commission determines that a proposed subdivision may affect the flood height, velocity, or duration in any flood prone area outside its jurisdiction, the commission shall take all actions necessary and proper to ensure the coordinated review of the development with the appropriate governmental agencies of the affected area.

In approving plans for subdivision of land containing flood prone areas, the Planning Commission shall ensure that development will proceed in such a way that property lying within any floodway, as defined by these regulations, will be maintained in a manner as prescribed by any zoning ordinance. The Planning Commission shall also ensure that development within any floodway fringe area (within the one hundred-year floodplain) will be protected adequately against potential flood hazards by the methods prescribed in Article IV, of these regulations. Encroachments in the regulatory floodway caused by roadway embankments or fills shall be supported by engineering analyses proving that the proposed work does not cause any increase in the base flood elevation (100-year flood elevation) or the floodway surcharge. Such analyses shall be prepared by an engineer licensed in the State of Tennessee and experienced in this work. Encroachments in the regulatory floodway that are not supported by appropriate analyses shall not be permitted either directly or by variance.

Where protection against flood damage is necessary, in the opinion of the Planning Commission, flood-damage protection techniques may include, as deemed appropriate by the Planning Commission:

- 1. the imposition of any surety and deed restrictions enforceable by the Planning Commission to regulate the future type and design of uses within the flood prone areas; and
- flood protection measures designed so as not to increase, either individually or collectively, flood flows, height, duration, or damages, and so as not to infringe or encroach upon the regulatory floodway;
- installation of flood warning systems;
- 4. the use of fill, dikes, levees, and other protective measures;
- 5. the use of floodproofing measures, which may include:
 - (a) anchorage to resist flotation and lateral movement;
 - (b) installation of watertight doors, bulkheads, shutters, or other similar methods of closure;
 - (c) reinforcement of walls to resist water pressures;
 - (d) use of paints, membranes, or mortars to reduce seepage through walls;
 - (e) addition of mass or weight to structures to resist flotation;
 - (f) installation of pumps to lower water levels in structures;
 - (g) construction of water supply and waste treatment systems so as to prevent the entrance of or contamination of flood waters;
 - (h) installation of pumps or comparable facilities for subsurface drainage systems to relieve external foundation wall and basement flood pressures;
 - (i) building design and construction to resist rupture or collapse caused by water pressure of floating debris;
 - installation of valves or controls on sanitary and storm drains which permit the drains to be closed to prevent backup of sewage and storm water into buildings or structures;
 - (k) location and installation of all electrical equipment, circuits, and appliances so that they are protected from inundation by the regulatory flood;

(I) location of storage facilities for chemicals, explosives, buoyant material, flammable liquids, or other toxic materials which would be hazardous to the public health, safety, and welfare at or above the regulatory flood protection elevation, or design of such facilities to prevent flotation of storage containers or damage to storage containers which could result in the escape of toxic materials.

All such flood protection measures shall be designed so as not to increase, either individually or collectively, flood flows, heights, duration, or damages so as not to encroach upon the regulatory floodway.

All such flood protection measures shall be designed by a licensed professional and shall be submitted with sealed plans and calculations prepared by that professional.

The Planning Commission may when it deems necessary for the health, safety, or welfare of the present and future population of the area or necessary to the conservation of water, drainage, and sanitary facilities, prohibit the subdivision of any portion of the property which lies within the floodplain of any stream or drainage course. The regulatory floodway shall be preserved from any and all destruction or damage resulting from clearing, grading, or dumping of earth, waste material, or stumps. Minor excavation may be permitted within the regulatory floodway upon submittal and approval of a grading plan. Placement of fill or structures in the regulatory floodway shall not be permitted except as indicated in previous paragraphs.

The Planning Commission shall disapprove the subdivision of any land containing a flood prone area when the commission determines that subdivision plans are not consistent with the policy stated in this section.

2-101.5 <u>Special Provisions Governing Unit Ownership</u> (Condominium) Subdivisions

2-101.501 General Provisions

- a. <u>Intent</u> -- This section is intended to augment the general legislation of Sections 66-27-101 through 66-27-123, <u>Tennessee Code</u>, entitled "Horizontal Property Act," by providing supplemental rules and regulations for the implementation of the act, as specifically authorized in Section 66-27-121, Tennessee Code.
- b. Applicability -- Whenever a developer, the sole owner, or the co-owners of a building or buildings expressly declare through the submission of a master deed, lease, or plat their desire to submit their property to a regime, as established and provided by Sections 66-27-101 through 66-27-123, Tennessee Code, wherein there is established a horizontal property regime, each such condominium or horizontal property regime created under the authority of these provisions for the purpose of sale or transfer of real property is subject to the provisions of these regulations.

2-101.502 Submission of Plat Required

Prior to the sale or transfer of any property incorporated in the property regime, the developer, sole owner, or co-owners of such property shall submit to the Planning Commission a subdivision plat of such property in the manner prescribed by this article; such plat, if approved, shall be filed with the county register in the manner prescribed by this article.

2-101.503 <u>Determination of Subdivision Type</u>

Condominium subdivisions shall be classified by the Planning Commission during the plat review process as either horizontal condominiums or vertical condominiums as defined in Article VI, of these regulations.

2-101.504 **Procedure**

An applicant seeking approval of a condominium subdivision shall proceed through the normal procedure for subdivision approval, as set forth in this article.

2-101.505 Contents of Plans and Documents

The plats, plans, and documents submitted by an applicant seeking approval of condominium subdivision shall conform with the specifications set forth in Article V, of these regulations.

2-102 Sketch Plat (Major Subdivisions Only)

2-102.1 Purpose of Sketch Plat

The applicant shall submit a sketch plat to the Office of Planning and Zoning for review. The sketch plat is to be a concept plan for design purposes and should be used to discover all factors which may have an impact on the proposed development and to advise the subdivider of various possibilities before substantial amounts of time and money have been invested in a very detailed proposal which may contain elements contrary to these regulations.

2-102.2 Sketch Plat Requirements

The sketch plat shall include the information set forth in Section 5-101.

2-102.3 Approval of Sketch Plat

Copies of the sketch plat shall be submitted to the Office of Planning and Zoning for review and approval. The number of copies shall be determined by the enforcing officer. Approval of the plat shall constitute authorization to prepare detailed plans and specifications.

2-103 Preliminary Plat (Major Subdivisions Only)

2-103.1 Application Procedure and Requirements

The applicant shall file with the Planning Commission a preliminary plat. The failure of the applicant to satisfy the requirements of this section with full and correct information shall be cause for disapproval of a preliminary plat. The preliminary plat shall be prepared in accordance with Section 5-102, and:

- 1. be presented at the office of the enforcing officer prior to the cutoff deadline for a regular (officially opened) meeting of the Planning Commission:
- 2. include all land which the applicant proposes to subdivide and all land immediately adjacent, extending two hundred (200) feet therefrom, or of that directly opposite thereto, extending two hundred (200) feet from the public way frontage of such opposite land. The lot pattern of surrounding development shall be shown within that area located within two hundred (200) feet of the proposed development;
- 3. be accompanied by the number of copies of the preliminary plat as described herein as determined by the enforcement officer; and
- 4. be accompanied by the number of copies of construction plans as described in Section 5-103 as determined by the enforcement officer, of these regulations.

2-103.2 Administrative Review

An administrative review meeting shall be conducted on the preliminary plat, construction plans, and any exhibits submitted in conformance with these regulations. This review shall include the staff that make recommendations to the Planning Commission and any other appropriate governmental representative. The review shall be held prior to the regularly scheduled Planning Commission meeting at which the plat is to be reviewed. The findings of the review committee shall be presented to the Planning Commission.

2-103.3 Notice of Hearing

A Planning Commission shall hold a hearing as required by 13-4-304, <u>Tennessee Code</u>, on each plat brought before it.

2-103.4 Preliminary Approval

After the Planning Commission has reviewed the preliminary plat, construction plans, exhibits, and the results of administrative review, the applicant shall be advised of any required changes. The Planning Commission shall approve, conditionally approve, or disapprove the preliminary plat within thirty-five (35) days after date of the regular meeting of the Planning Commission at which the hearing on preliminary approval, including adjourned date thereof, is closed.

A certificate of preliminary approval shall be issued by the secretary of the Planning Commission, upon demand, and the applicant may proceed to apply for final subdivision plat approval in the manner prescribed by Section 2-104, of these regulations.

After the Planning Commission approves, conditionally approves, or disapproves the preliminary plat, one copy of the proposed preliminary plat shall be returned to the applicant with the date of approval, conditional approval, or disapproval thereon. If a preliminary plat is disapproved the Planning Commission shall state specific reasons for disapproval which shall be entered into the minutes of the meeting.

Before the Planning Commission approves a preliminary plat showing land for any public use, the Planning Commission shall obtain approval for the land reservation from the City Council or appropriate governmental agency.

2-103.5 Public Improvements

The Planning Commission may require that all public improvements be installed and dedicated prior to the signing of the final subdivision plat by the secretary of the Planning Commission. If the Planning Commission does not require that all public improvements be installed and dedicated prior to signing of the final subdivision plat, an adequate performance bond shall be approved. The amount of such bond shall be established by the appropriate city department based upon the cost estimates of such department with the help of other departments or experts that may be available or of the appropriate governmental representative (Such as the Water Authority of Dickson County) or by receipt of cost bids from two (2) or more independent contracting firms equal to the cost of all necessary improvements plus an additional twenty (20) percent to cover inflation.

Such bond shall be submitted by the applicant at the time of application for final subdivision plat approval. The Planning Commission shall require the applicant to indicate on the plat all public ways and improvements to be dedicated; all districts for water, fire, and utility improvements which shall be required to be established or extended; and any other special requirements deemed necessary by the Planning Commission in order for the subdivision plat to conform to the major street or road plan and the land development plan for the jurisdictional area.

2-103.6 <u>Effective Period of Preliminary Approval</u>

The approval of a preliminary plat shall be effective for a period of twelve (12) months, at the end of which time final approval of the subdivision plat must have been obtained from the Planning Commission, although the plat need not have been signed and filed with the county register. Any plat not receiving final approval within the period of time set forth herein shall be null and void, and the developer shall be required to submit a new plat for approval subject to any zoning provisions and the subdivision regulations currently in effect. Prior to the expiration of the preliminary approval and upon proper request by the applicant, the approval may be

extended for one (1) additional year if the commission deems such to be advisable based upon progress made in developing the subdivision.

2-103.7 **Zoning Regulations**

Every plat shall conform to any existing zoning regulations and subdivision regulations applicable at the time of proposed final approval, except that any plat which has received preliminary approval shall be exempt from any subsequent amendments to such zoning ordinance or these regulations rendering the plat nonconforming as to bulk, use, or development standards, provided, that final approval is obtained within the effective period of preliminary approval set forth in Subsection 2-103.6, herein.

2-104 Final Subdivision Plat (Minor and Major Subdivision)

2-104.1 Application Procedure and Requirements

A subdivider shall file with the Planning Commission a final plat. The plat shall be prepared in accordance with Section 5-104, and:

- 1. include the entire subdivision, or section thereof, for which final approval is sought;
- 2. be accompanied by the number of copies of the final subdivision plat as described herein as determined by the enforcing officer.
- 3. comply substantially with the preliminary plat, where such plat is required;
- be presented at the office of the enforcing officer on the Planning Commission's standard Mylar form prior to the cutoff deadline of the regular meeting of the commission at which it is to be considered;
- 5. be accompanied by formal irrevocable offers of dedication to the public of all public ways and uses, utilities, parks, and easements, in a form approved by legal counsel, as applicable. (The subdivision plat shall be marked with a notation indicating the formal offers of dedication as shown in Article V, of these regulations.);
- 6. be accompanied by a performance bond, if required, in a form satisfactory to legal counsel and in an amount adequate to complete the required improvements. It shall include provisions that the principal of the bond shall comply with all the terms of the resolution of final subdivision plat approval, as determined by the Planning Commission, including, but without limitations, the performance of all required subdivision and offsite improvements, and that all improvements and land included in the irrevocable offers of dedication shall be dedicated to the Planning Commission free and clear of all liens and encumbrances on the premise(s);

- 7. be accompanied by written assurance from any public utility companies serving the area of the subdivision that necessary utilities will be installed and by proof that the applicant has submitted petitions in writing for the creation or extension of any utility districts as required by the Planning Commission upon preliminary plat approval; and
- 8. be accompanied, if the final plat contains open space, or recreational facilities, of if any portion of the site is in common ownership, by the following documentation for approval by the Planning Commission:
 - (a) plans for improvement and maintenance of the open space or facilities located thereon;
 - (b) articles of incorporation and bylaws of the co-owners association or other legal entity (where open space or facilities are to be deeded to a co-owners association or similar organization acting on behalf of the joint owners of said property) charged with improving or maintaining the open space or facilities, and declaration of covenants and restrictions pertaining to each and every property within the subdivision;
 - (c) declaration of covenants and restrictions pertaining to open space and facilities which assure the continued use of said facilities for the purpose intended, where open space or facilities are to be retained by the developer.
- 9. be accompanied by construction plans and specifications for all public improvements such as roadways, underground utilities, drainage improvements, bridges, sidewalks, etc.

2-104.2 Endorsement of Notations

The notations and certifications required by Subsection 5-104.3, of these regulations, to appear upon the final plat shall be endorsed by appropriate officials and other persons prior to application for final subdivision plat approval, except that the certificate of Planning Commission approval shall be signed at the time specified in Section 2-105, of these regulations.

2-104.3 Hearing and Decision on Final Plat

The Planning Commission shall hold a hearing as required by Section 13-4-304, <u>Tennessee Code</u>, on each final plat brought before it. The Planning Commission shall, within thirty-five (35) days after submission of the plat, approve, modify, or disapprove the final subdivision plat by resolution, which shall set forth in detail any conditions to which the approval is subject, or reasons for disapproval. In no event shall the period of time stipulated by the Planning Commission for completion of required improvements exceed one (1) year from the date of final resolution.

Failure of the Planning Commission to act upon a plat within the prescribed time shall be deemed approval of the plat, and in such event, a certificate of approval, entitling the subdivider to proceed as specified in Subsection 2-104.4 and Section 2-105, of these regulations, shall be issued, upon demand, by the secretary of the Planning Commission. The applicant, however, may agree to an extension of the time for Planning Commission review.

One (1) copy of the final subdivision plat shall be returned to the subdivider with the date of approval, conditional approval, or disapproval noted thereon.

2-104.4 Vested Rights

No vested rights shall accrue to any plat be reason of preliminary or final approval until the actual signing of the plat by the secretary of the Planning Commission and recording in the office of the county register. All requirements, conditions, or regulations adopted by the Planning Commission, applicable to the particular subdivision or to all subdivision generally, shall be deemed a condition of approval for any subdivision prior to the time of the signing of the final plat by the secretary of the Planning Commission. Where the Planning Commission has required the installation of improvements prior to the signing of the final plat, the Planning Commission shall not modify unreasonably the conditions set forth in the resolution of final approval.

2-105 Signing and Recording of Subdivision Plat

2-105.1 Signing of Plat

- 1. When a bond is required, the secretary of the Planning Commission shall endorse approval on the plat after the bond has been approved by the Planning Commission and after all the conditions of the resolution pertaining to the plat have been satisfied.
- 2. When installation of improvements is required, the secretary of the Planning Commission shall endorse approval on the plat after all conditions of the resolution have been satisfied and all improvements satisfactorily completed. There shall be written evidence that the required public facilities have been installed in a manner satisfactory to the Planning Commission as shown on certifications by the appropriate governmental representative(s) that necessary land dedications and improvements have been accomplished.
- 3. When the conditions of this section are satisfied, the secretary shall sign the permanent reproducible original of the subdivision plat.
- 4. In no event shall any action by the Planning Commission approving a subdivision plat become final until the plat is signed by the secretary of the Planning Commission.

2-105.2 Recording of Plat

- 1. All plats receiving final approval of the Planning Commission shall within ninety (90) days following the date of the meeting at which such approval is granted be presented to the enforcing officer for purposes of obtaining the signature of the secretary of the Planning Commission and filing with the county register.
- 2. Any plat not presented for signing and filing within the ninety (90) day period specified above shall be null and void and shall require a new hearing and decision on final approval as set forth in Subsection 2-104.3. In no event shall the secretary sign nor shall the enforcing officer attempt to file any plat not presented for signing and filing within the ninety (90) day period specified herein.
- 3. It shall be the responsibility of the enforcing officer to file the plat with the county register's office within ten (10) days of the date of signature. Simultaneously, with the filing of the plat, the enforcing officer shall record the agreement of dedication together with such legal documents as shall be required to be recorded by legal counsel.

2-105.3 <u>Sectionalizing Major Subdivision Plats</u>

Prior to granting final approval of a major subdivision plat, the Planning Commission may permit the plat to be divided into two (2) or more sections and may impose such conditions upon the filing of each section as it may deem necessary to assure the orderly development of the subdivision.

The Planning Commission may require that a performance bond be in such amount as is commensurate with the section or sections of the plat to be filed and may defer the remaining required performance bond principal amount until the remaining sections of the plat are offered for filing. The developer also may file irrevocable offers to dedicate public ways and improvements in the section offered to be filed and defer filing offers of dedication for the remaining sections until such sections, subject to any conditions imposed by the Planning Commission, shall be granted concurrently with final approval of the plat. Such authorized sections must contain at least ten (10) percent of the total number of lots contained in the proposed plat unless a specific waiver of this requirements is granted by the Planning Commission.

2.105.4 As Built Drawings

The developer shall submit to the city as built drawings. The as-built drawings shall be prepared by a licensed engineer or land surveyor and shall indicate the extent of constructed features, elevations and other necessary information as required by the Codes Official, Public Works Director or other official. No permits for construction of individual homes in residential subdivisions shall be issued prior to receipt of approved asbuilt drawings. No Certificate of Occupancy shall be issued for commercial/industrial buildings prior to receipt of approved as-built drawings.

ARTICLE III

ASSURANCE FOR COMPLETION AND MAINTENANCE OF IMPROVEMENTS

3-101 Improvements and Performance Bond

3-101.1 <u>Subdivision Development Agreement</u>

Prior to commencement of construction or site grading all developers shall have entered into the currently adopted Subdivision Development Agreement as approved by the Dickson City Council.

3-101.2 Completion of Improvements

Before the final subdivision plat is signed by the Planning Commission officer specified in Subsection 2-105.1, of these regulations, all applicants shall complete, in accordance with the Planning Commission's decision and to the satisfaction of the appropriate governmental representative, all public way, sanitary, and other improvements, including lot improvements on the individual lots of the subdivision, as required in these regulations and approved by the Planning Commission, and shall dedicate such improvements to the governing body free and clear of all liens and encumbrances on the property and public improvements thus dedicated.

3-101.3 Surety Instrument

The Planning Commission at its discretion may waive the requirement that the applicant complete and dedicate all public improvements prior to the signing of the final subdivision plat by providing that, as an alternative, the applicant post a bond at the time of submission for final subdivision approval in an amount estimated by the appropriate city department or other governmental agency (Such as the Water Authority of Dickson County) as sufficient to guarantee to the governing body the satisfactory construction, installation, and dedication of the incomplete portion of required improvements. (See Subsection 2-103.5).

Such performance bond shall comply with all statutory requirements and shall be satisfactory to legal counsel as to form, sufficiency, and manner of execution, as set forth in these regulations. The period within which required improvements must be completed shall be specified in the bond and shall not exceed two (2) years from date of final approval.

Such bond shall be approved by the city department or other governmental agency (Such as the Water Authority of Dickson County) as to amount and conditions. The City, if approved by the Planning Commission may, upon proof of difficulty, extend the completion date set forth in such bond for a maximum period of one (1) additional year. The city may accept at any time during the period of such bond a substitution of principal.

3-101.4 Temporary Improvements

The applicant shall build and pay for all costs of temporary improvements required by the Planning Commission, and shall maintain them to a reasonable satisfaction for the period specified by the Planning Commission. Prior to construction of any temporary facility or improvement, the applicant shall file with the Planning Commission a separate suitable bond for temporary facilities, which shall ensure that the temporary facilities will be properly constructed, maintained, and removed.

3-101.5 Costs of Improvements

All required improvements shall be made by the applicant at his expense. Any provisions for reimbursement by the governing body or any utility agency shall be stipulated clearly in the provisions of any bonds.

3-101.6 Governmental Units

Governmental units to which these bonds and contract provisions apply may file, in lieu of said contract or bond, a certified resolution or ordinance from officers or agencies authorized to act in their behalf agreeing to comply with the provisions of this article.

3-101.7 <u>Failure to Complete Improvements</u>

In subdivisions for which no performance bond has been posted, if the improvements are not completed within the period specified by the Planning Commission in the resolution approving the plat, the approval shall be deemed to have expired. In those cases in which a performance bond has been posted and required improvements have not been installed within the terms of such performance bond, the Planning Commission thereupon may declare the bond to be in default and require that all the improvements be installed regardless of the extent of the building development at the time the bond is declared to be in default.

3-101.8 Acceptance of Dedication Offers

Acceptance of formal offers of dedication of public ways, easements, and parks shall be by formal action of the City Council. The appropriate city department shall recommend acceptance by the City Council of improvements when such department has verified completion of such improvements. The approval by the Planning Commission of a subdivision plat shall not be deemed to constitute or imply an acceptance by the local government of any public way, easement, or other ground shown on the plat. The Planning Commission may require the plat to be endorsed with appropriate notes to this effect. However, approval by the Planning Commission of a final plat shall be considered a recommendation that such easements, public ways, or other infrastructure be accepted by the City Council upon their completion.

3-102 Inspection of Improvements

3-102.1 General Procedure

The city may provide for inspection of required improvements during construction and ensure their satisfactory completion. If the appropriate governmental representative finds upon inspection that any of the required improvements has not been constructed in accordance with the governing body's construction standards and specifications, the applicant shall be responsible for completing the improvements to the required standards. Whenever the cost of improvements is covered by a performance bond, the applicant and the bonding company shall be liable severally and jointly for completing said improvements according to specifications.

3-102.2 Release or Reduction of Performance Bond

3-102.201 Certificate of Satisfactory Completion

The city shall not recommend dedication of required public improvements nor shall the city release nor reduce a performance bond until the appropriate governmental representative submits a certificate stating that all required improvements have been satisfactorily completed, and until the applicant's engineer or surveyor has certified to the Planning Commission and/or the appropriate governmental representative (through submission of a detailed "as built" survey of the subdivision indicating location, dimensions, construction materials, and any other information required by the city) that the layout and the line and grade of all public improvements are in accordance with the approved construction plans for the subdivision. Upon such approval and recommendation, the governing body, thereafter, may accept the dedicated improvements in accordance with the procedures set forth in these regulations.

3-102.202 Reduction of Performance Bond

A performance bond may be reduced upon actual dedication and acceptance of public improvements and then only to the ratio that the public improvement dedicated bears to the total public improvements for the plat. In no event shall a performance bond be reduced below twenty-five (25) percent of the principal amount prior to final acceptance of all items covered under the bond.

3-103 Maintenance of Improvements

The applicant shall be required to maintain all improvements including all lot improvements, until acceptance of the public improvements by the governmental body.

The applicant may be required to file a maintenance bond with the city prior to dedication, in an amount considered adequate by the appropriate governmental representative and in a form satisfactory to legal counsel in order to assure the satisfactory condition of the required improvements, including all lot

improvements, for a period of one year after the date of acceptance of the public improvements by the city.

3-104 <u>Deferral or Waiver of Required Improvements</u>

The Planning Commission may defer or waive at the time of final approval, subject to appropriate conditions, the provision of any or all such improvements as, in its judgment, are not requisite in the interest of the public health, safety, and general welfare, or which are inappropriate because of inadequacy or lack of connecting facilities.

Whenever it is deemed necessary by the Planning Commission to defer the construction of any improvement required herein because of incompatible grades, future planning, inadequate or lack of connecting facilities, or other reasons, the developer shall either pay his share of the costs of the future improvements to the Planning Commission prior to signing of the final subdivision plat by the appropriate governmental representative(s) or post a bond or other surety instrument ensuring completion of said improvements upon demand of the Planning Commission.

3-105 Escrow Deposits for Lot Improvements

3-105.1 Acceptance of Escrow Funds

Whenever, by reason of the season of the year, any lot improvements required by these regulations cannot be performed, the enforcing officer nevertheless may issue a certificate of occupancy upon accepting a cash escrow deposit in an amount to be determined by the appropriate governmental representative for the cost of such improvements; provided, there otherwise is no danger to the health, safety, or general welfare. The performance bond covering such lot improve-ments shall remain in full force and effect.

3-105.2 Procedures on Escrow Fund

All required improvements for which escrow moneys have been accepted by the enforcing officer at the time of issuance of a certificate of occupancy shall be installed by the developer within a period of nine (9) months from the date of deposit and issuance of the certificate of occupancy. In the event that the improvements have not been installed properly at the end of the time period, the enforcing officer shall provide written notice of two (2) weeks to the developer requiring him to install the improvements, and in the event they are not installed properly, in the judgment of the enforcing officer, he may request the Planning Commission to proceed to install or to contract for the installation of the necessary improvements in a sum not to exceed the amount of the escrow deposit.

At the time of the issuance of the certificate of occupancy for which escrow moneys are being deposited, the applicant shall obtain and file with the enforcing officer, prior to obtaining the certificate of occupancy, a notarized statement from the purchaser(s) of the premise authorizing the enforcing officer to install the improvements at the end of the nine (9)

month period in the event the improvements have not been installed properly by the developer.

3-106 <u>Issuance of Building Permits and Certificates of Occupancy</u>

- A. Where a performance bond has been required for a subdivision, or any section of a subdivision, no certificate of occupancy for any building in the subdivision or section thereof shall be issued prior to the completion and dedication of the improvements to the appropriate governmental unit, as required in the Planning Commission's resolution of final approval of the subdivision plat.
- B. The extent of public way improvements shall be adequate for vehicular access by the prospective occupant and by police and fire equipment prior to the issuance of an occupancy certificate. The developer shall at the time of the dedication submit monies in escrow to the Planning Commission in a sum to be determined by the appropriate governmental representative for the necessary final improvement of the street.
- C. No building permit shall be issued for the final ten (10) percent of lots in a subdivision, or if ten (10) percent be less than two (2) lots, for the final two (2) lots of a subdivision, until all public improvements required by the Planning Commission's resolution of final plat approval have been fully completed, dedicated, and accepted by the governmental body.

ARTICLE IV

REQUIREMENTS FOR IMPROVEMENTS, RESERVATIONS, AND DESIGN

4-101 General Requirements

4-101.1 Conformance to Applicable Rules and Regulations

In addition to the requirements established herein, all subdivision plats shall comply with all applicable laws, ordinances, resolutions, rules, or regulations, including, but not limited to:

- 1. all applicable provisions of Tennessee Law, regulations, or policy;
- 2. any zoning ordinance, any building and housing codes, and all other applicable laws or policies of the Planning Commission;
- 3. the adopted general plan and major road or streets (public way) plan;
- 4. the rules of the county health department and the Tennessee Department of Environment and Conservation;
- 5. the rules, as applicable, of the Federal Highway Administration or Tennessee Department of Transportation, if the subdivision or any lot contained therein abuts a non-local highway; and
- 6. the standards and regulations adopted by all other boards, commissions, and agencies of the Planning Commission, where applicable.

Plat approval may be withheld if a subdivision is not in conformity with the above rules or with the provisions set forth in Section 1-104, of these regulations.

4-101.2 <u>Self-Imposed Restrictions</u>

If the owner places restrictions on any of the land contained in the subdivision greater than those required by any zoning ordinance or these regulations, such restrictions or reference thereto shall be recorded with the county register on a separate form, along with the final subdivision plat in the office of the county register.

4-101.3 Monuments

The subdivider shall place permanent reference monuments on the subdivision as required herein and as approved by a licensed surveyor. Monuments shall be located and set as follows.

1. Monuments shall be located on public way right-of-way lines, at public way intersections, and at the beginning and ending point of curves.

- 2. The external boundaries of a subdivision shall be monumented in the field by monuments of stone or concrete not less than two and one-half (2 1/2) feet in length; not less than four (4) inches square or four (4) inches in diameter; and marked on top with a cross, brass plug, iron rod, or other durable material securely embedded, except where permanent markers are in existence. These monuments shall be placed not more than fourteen hundred (1,400) feet apart in any straight line and at all corners or breaks at each end of all curves, at the point where a curve changes its radius, at all angle points in any line, and at all angle points along a meander line, said points to be not less than twenty (20) feet back from the bank of any river or stream, except that when such corners or points fall within a public way or proposed future public way, the monuments shall be placed on the side line of the public way.
- 3. All internal boundaries and those corners and points not referred to in the preceding paragraph shall be monumented in the field by like monuments as described above. Such monuments shall be placed at each end of all curves, at a point where a river changed its radius, and at all angle points in any line. All lot corners not falling on any of the above described points shall be marked by iron rods, pipe, or pins at least eighteen (18) inches long and five-eights (5/8) inch in diameter.
- 4. The lines of lots that extend to rivers or stream shall be monumented in the field by iron pins at least eighteen (18) inches long and five-eights (5/8) inch in diameter or by round or square iron bars at least eighteen (18) inches long. Such pins shall be placed at the point of intersection of the river or stream and lot line, with a meander line established not less than twenty (20) feet back from the bank of the river or stream.
- 5. All monuments and pins shall be properly set in the ground and approved by a surveyor engaged in the practice of land surveying prior to the time the Planning Commission recommends approval of the final plat or release of the bond where bond is made in lieu of improvements.

4-101.4 Character of the Land

Land which the Planning Commission finds to be unsuitable for subdivision or development due to flooding, improper drainage, steep slopes, rock formations, adverse earth formations or topography, utility easements, or other features which would be harmful to the safety, health, and general welfare of inhabitants of the land and surrounding areas shall not be subdivided or developed unless adequate methods are formulated by the developer and approved by the Planning Commission, upon recommendation of any staff assistant serving the Planning Commission and/or other governmental representative, if any, to solve the problems created by the unsuitable land conditions. Such land shall be set aside for such uses as will not involve such a danger.

4-101.5 Subdivision Name

The proposed name of the subdivision shall not duplicate or too closely approximate phonetically the name of any other subdivision located within the City of Dickson or its approved urban growth boundary. The Planning Commission shall have authority to designate the name of the subdivision which shall be determined at sketch or preliminary plat approval.

4-102 Lot Requirements

4-102.1 Lot Arrangement

4-102.101 General

The lot arrangement shall be such that there will be no foreseeable difficulties, for reasons of topography, flood hazards, or other conditions in securing building permits to build on all lots in compliance with any zoning ordinance, the Tennessee Department of Environment and Conservation and county public health department regulations and in providing driveway access to buildings on such lots from an approved public way.

4-102.102 <u>Solar Access</u>

A reasonably feasible lot arrangement shall be such that building sites will afford maximum utilization of energy conservation measures, such as providing for solar access purposes.

4-102.103 Lots Subject to Flood

Where a lot in any flood prone area must be improved to provide a building site free from flooding, such improvements shall be made outside the floodway by elevation or fill to at least one foot above the regulatory flood protection elevation (one hundred-year flood) for a distance extending at least twenty-five (25) feet beyond the limits of intended structures and, additionally, extending a sufficient distance to include areas for subsurface sewage disposal if the lot is not to be connected to a public sanitary sewer system. Any fill shall be protected against erosion by rip-rap, vegetative cover, or other methods deemed acceptable by the Planning Commission. Additionally, such fill shall be protected against slope failure through appropriate means.

In nonresidential building sites outside a floodway but subject to flooding, the use of structural floodproofing methods specified in Subsection 4-101.4, of these regulations, as an alternative to landfill, may be approved by the Planning Commission, as provided in Subsection 2-101.4, of these regulations provided such measures comply with requirements for such floodproofing as adopted in the Dickson Zoning Ordinance.

4-102.104 Lots Located on Steep Slopes

Due to the potential threat to health and safety posed by development located on lands with slopes in excess of twenty (20) percent, the following regulations shall apply.

- a. <u>Site Development Plan Required</u> -- No building permit shall be issued for a building or any lot with slopes twenty (20) percent or over until a site plan meeting the following requirements has been approved by the Planning Commission. Said site plan shall show:
 - (i) The exact size, shape, and location of the lot,
 - (ii) The proposed location of all buildings, driveways, drainageways and utilities,
 - (iii) Proposed contours at vertical intervals of no more than ten (10) feet,
 - (iv) The extent of natural tree cover and vegetation,
 - (v) The location of any onsite soil absorption sewage disposal systems,
 - (vi) The type and location of erosion control methodology.
 - (vii) The surveyor's or engineer's stamp that prepared the plan,
 - (viii) Proper design of site for areas with steep slopes and land slide problems by a Registered Engineer.
- b. <u>Site Development Standards</u> -- The following standards shall be used as a guide in determining the suitability of the construction proposed for the particular site in question. The engineer's design required in Subsection 4-102.104, a, (viii), above, shall address these standards.
 - (i) Natural vegetation shall be preserved to the maximum extent possible,
 - (ii) Natural drainageways and systems shall be maintained, except that surface water may be diverted around a house or slope area to a natural drain using acceptable construction techniques,
 - (iii) Operations that increase loads, reduce slope support, and cause instability of the slope shall be prohibited to the maximum extent possible which will permit reasonable development of the site. These include filling, irrigation systems, accessory buildings, and onsite soil absorption sewage disposal systems,

- (iv) Where sanitary sewers are not available any onsite sewage disposal system shall be shown on the site plan and located to avoid slide-prone areas. Said system shall be approved by the county health department prior to the Planning Commission's review taking into account these requirements,
- (v) Erosion control measures shall be employed to prevent all soil material from leaving the site. Additionally, soil from excavation on the site shall not be disposed as fill on a potential slide area,
- (vi) No construction which would cut the toe of the slope shall be permitted. This shall apply as well to subdivision roads constructed in compliance with these regulations.
- c. All lots subject to these provisions shall be so designated on the final plat

4-102.2 <u>Lot Dimensions</u>

Lot dimensions shall comply with the minimum standards of any zoning ordinance, where applicable. Where lots are more than double the minimum area required by any zoning ordinance, the Planning Commission may require that such lots be arranged so as to allow further subdivision and the opening of future public ways where they would be necessary to serve such potential lots, all in compliance with any zoning ordinance and these regulations. Generally side lot lines shall be at right angles to street lines or radial to curving street lines.

The minimum lot frontage on a public way or private easement shall be fifty (50) feet except, lots fronting on the radius of a cul-de-sac shall have a minimum frontage of thirty (30) feet. Any lot having direct ingress/ egress to an existing City roadway shall be located so as to have the minimum sight distance as shown on Table 1.

Dimensions of the corner lots shall be large enough to allow for erection of buildings, observing the minimum front yard setback requirements from both public way rights-of-way.

Depth and width of properties reserved or laid out for business, commercial, or industrial purposes shall be adequate to provide for the off-street parking and loading facilities required for the type of use and development contemplated, and as established in any zoning ordinance.

4-102.3 Width to Depth Ratio

No lot when subdivided shall have a greater width to depth than one to four (1:4); therefor, when any lot is subdivided from an existing lot or tract, no side lot line shall be greater than four (4) times the length of the front

lot line. Lots that front along the radius of a cul-de-sac are exempt from this requirement.

4-102.4 Building Setback Lines

In the case of electric transmission lines where easement widths are not definitely established, a minimum building setback line from the center of the transmission line shall be established as follows:

Voltage of Line Setback		<u>Building</u>
7.2	KV	15
13	KV	feet 25 feet 37 1/2
46	KV	
69	KV	feet 50
		feet
161	KV	75 feet

4-102.5 Restrictions for Lots with Access to Two or More Streets.

Driveway access points may be restricted by the Planning Commission as follows:

- A. to the roadway with the lessor thoroughfare classification as shown on the Dickson Major Thoroughfare Plan.
- B. to the roadway with the least average daily traffic when both streets share the same thoroughfare classifications.
- C. to the roadway with the best sight distance, the least slope, etc. provided that there are significant topographical or other physical conditions (including flood prone areas) on the property that would, in the opinion of the Planning Commission, prevent the application of these restrictions from protecting public safety.

4-102.502 Access from Arterial or Collector Public Ways

The Planning Commission may require that lots shall not derive access exclusively from arterial or collector public ways. Where driveway access from such public ways may be necessary for several adjoining lots, the Planning Commission may require that the lots be served by a combined access drive in order to limit possible traffic hazards. Driveways shall be designed and arranged

so as to avoid requiring vehicles to back onto arterial or collector public ways.

4-102.6 Soil Preservation, Grading, Erosion Control, and Seeding

4-102.601 Soil Preservation and Final Grading

Except as required for the building site, top soil shall not be removed from residential lots or used as spoil, but shall be redistributed so as to provide cover on the lots. Upon lots served by individual sewage disposal systems, grading shall be performed in strict accordance with requirements of the local office of the State Department of Environment and Conservation.

4-102.602 <u>Lot Drainage</u>

Lots shall be laid out so as to provide positive drainage away from all buildings, and individual lot drainage shall be coordinated with the general storm drainage pattern for the area which includes subsurface drainage. Drainage shall be so designed so as to avoid concentration of storm drainage water from each lot to adjacent lots. No subdivision shall be allowed to increase the instance of flooding upon an adjoining property.

The Planning Commission reserves the right to require the developer's engineer to set minimum elevations on all floors, patios, and building equipment. This prerogative to establish elevation exists in addition to any ordinances that refer to floodplain elevation requirements. The content of the preceding paragraph is to give the Planning Commission summary review powers over any calculated or historical evidence of storm water presence in overland or channel conditions.

The subdivision developer will ensure that all artesian ground waters of a permanent or temporary nature encountered within the right-of-way will be intercepted and carried away to primary drainage conduits along swaled ditches or in underground pipes on property line easements. Regardless of the location of property lines, intercept will be allowed at the point of artesian surfacing. The intent of this paragraph is to perform this work upon evidence of artesian water for a period of one (1) year following acceptance of all roads and utilities.

Any sinkhole or natural channel which serves or has served as a means of moving or storing ground water shall be protected as may be required by the city engineer. Additionally, the developer shall apply for, and obtain, any state permits required for work around a sinkhole prior to making application to the City.

4-102.603 Erosion and Sediment Control

There shall be a minimization of changes in the rate of natural erosion and sedimentation which result from the development

process. An erosion and sediment control plan shall be presented with the construction plans submitted in conformance with Section 5-103, of these regulations. Such plans shall incorporate the following principals:

- a. clearing and grading shall be integrated with layout design;
- b. clearing shall be minimized and existing vegetation shall be preserved to the maximum feasible degree;
- c. grading shall be strictly limited to those areas involved in current construction activities;
- d. disturbed areas shall be protected and stabilized as soon as possible;
- e. structural and vegetative measures to control the velocity and volume of runoff shall be required;
- f. sediment basins and traps shall be required as necessary;
- g. adequate maintenance of all planting and structures measures shall be assured.
- h. the developer shall comply with stipulations of the State of Tennessee General Permit for Discharge of Construction Storm Water and other applicable provisions of the Clean Water Act.

4-102.7 Debris and Waste

No cut trees, timber, debris, junk, rubbish, or other waste materials of any kind shall be buried in any land or left or deposited on any lot or public way at the time of the issuance of a certificate of occupancy for the lot, and removal of such waste shall be required prior to issuance of any certificate of occupancy. Neither shall any such waste be left nor deposited in any area of the subdivision at the time of expiration of the performance bond or dedication of public improvements, whichever is sooner. The developer shall provide waste receptacles within the project to collect construction waste and debris. Additionally, temporary sanitary facilities shall be provided at the site.

4-102.8 Fencing

Each subdivider or developer shall be required to furnish and install all fences wherever the Planning Commission determines that a hazardous condition exists. Such fences shall be constructed according to standards established by the Planning Commission, as appropriate, and shall be noted on the final plat as to height and required materials. No certificate of occupancy shall be issued for any affected lot until such fence improvements have been installed.

4-102.9 Water Bodies and Watercourses

If a tract being subdivided contains a water body, or portion thereof, lot lines shall be so drawn as to distribute the entire ownership of the water body among the fees of adjacent lots. The Planning Commission may approve an alternative plan whereby the ownership of and responsibility for safe maintenance of the water body is so placed that it will not become a governmental responsibility.

No more than ten (10) percent of the minimum area of a lot required under any zoning ordinance may be satisfied by land which is permanently under water. Where a watercourse separates a buildable area of a lot from the public way by which it has access, provisions shall be made for installation of culvert or other structure approved by the Planning Commission and no certificate of occupancy shall be issued for a structure on such a lot until the installation is completed and approved by the Planning Commission and/or the appropriate governmental representative.

Water bodies and watercourses (ponds, lakes and streams) shall be protected by a 25-feet buffer zone that shall not be disturbed by clearing, grading or other construction without approval by the Planning Commission. The intent of this measure is to protect water quality by providing vegetative filter strips, shading of streams, and reduce the risk of erosion immediately adjacent to the stream bank.

4-103 Streets

All Public and Private Streets shall be designed according the specifications of Appendix B.

4-103.1 Location and Arrangement of Driveways.

In order to insure the safety of the public and to allow for efficient flow of traffic on existing and proposed streets, the following standards for the location and arrangement of private driveways shall be applied to any new lot created after July 1, 2008.

A. All driveways shall meet the minimum sight distance requirements shown on Table 1 when they are placed on existing roadways.

Driveways in non-residential subdivisions shall be aligned so as to be directly across from existing roadways or driveways <u>OR</u> be restricted to a minimum safe distance between roads and driveways as shown on Table 2. The minimum distances between driveways on the same side and the opposite side as shown on Table 3 shall be measured from centerline to centerline of the driveways. A driveway shall be considered to be directly aligned to

the driveway (or roadway) on the opposite side of the street if their centerlines are within 5' of each other.

B. All driveways shall be located at the distances from roadway intersections as shown on Table 3.

When determining the distance of a road or driveway to an intersection such measurement shall be from the nearest tangent of each road or driveway as measured at the pavement.

C. Any conditions or restrictions concerning the location of driveways required or approved by the Planning Commission shall be so noted on the subdivision plat. Such notes shall be considered a condition of approval and shall be enforced by the Building Commissioner in the issuance of building permits and certificates of occupancy. Any such note required by the Planning Commission should not be construed as being a private restriction or covenant.

Driveway permits issued by the Tennessee Department of Transportation shall not be construed so as to allow driveways to be built without also meeting the requirements of these regulations. Any driveway restriction required by these regulations or by the Dickson Municipal Planning Commission shall be in addition to any restriction imposed by the Tennessee Department of Transportation.

D. The Planning Commission may reduce the driveway location provisions provided that physical features present at the site such as topography, site distance, existing roads and driveways, flood prone areas, etc. are present and that enforcement of such restrictions would be contrary to the protecting public safety.

Table 1 Road and Driveway Sight Distance Requirements				
Posted Speed Limit For Collector and Arterial Streets (Miles Per Hour)*	Minimum Sight Distance			
25	280'			
30	335'			
35	390'			
40	445'			
45	500'			
50	555'			
55	610'			

^{*} Sight Distance shall be 250' for all streets not classified as collector or arterial in the Dickson County Major Thoroughfare Plan.

Plated lots or other parcels less than 5 acres utilizing easements must meet the minimum sight distance requirements of this chart.

Table 2 Driveway Spacing Requirements for Non-Residential Subdivisions

Thoroughfare Classification	Minimum Distance (Spacing) Same Side	Minimum Offset (Opposite Side)	
Principal Arterial	300'	150'	
Major Arterial	300'	150'	
Minor Arterial	200'	100'	
Principal Collector	150'	75'	
Major Collector	150'	75'	
Minor Collector	150'	75'	
Other streets/ Minor Streets	25' #	50' #	

Plated lots or other parcels less than 5 acres utilizing easements must meet the minimum distance and offset requirements of this chart except where such easement shares a driveway with a lot with road frontage.

Except for driveways located on cul-de-sacs.

Table 3
Minimum Distance from Driveway to Roadway Intersection

Intersecting Street							
Thoroughfare Classification	Principal Arterial	Major Arterial	Minor Arterial	Principal Collector	Major Collector	Minor Collector	Minor Street
Street Where Driveway is							
Located ↓							
Other streets/ Minor Streets	150'	150'	100'	100'	75'	75'	50'
Minor Collector	150'	150'	125'	100'	100'	100'	NP
Major Collector	150'	150'	125'	125'	100'	NP	NP
Principal Collector	200'	150'	150'	125'	NP	NP	NP
Minor Arterial	200'	200'	150'	NP	NP	NP	NP
Major Collector	200'	200'	NP	NP	NP	NP	NP
Principal Arterial	250'	NP	NP	NP	NP	NP	NP

NP: Not Permitted. Driveways Must be Placed on Lessor Classed Thoroughfare.

4-103.3 Right-of-Way Width Dedication on Existing Streets

Where a subdivision adjoins an existing narrow street or where the major street or road plan or any zoning setback provisions indicate plans for realignment or widening of a street that would require use of some of the land in the subdivision, the subdivider shall be required to dedicate, at his expense, areas for widening or realigning such street as set forth below:

- 1. the entire right-of-way shall be provided where any part of the subdivision is on both sides of the existing street; or
- 2. when the subdivision is located on one side of an existing street, one half of the required right-of-way, measured from the center line of the existing pavement, shall be provided.

4-103.4 Roadway Classification and Pavement Design (Added by Resolution 2011-1, January 18, 2011)

Roadway classification and associated minimum standard typical sections are included in Appendix B. These typical roadway sections represent the minimum standard including base stone and pavement requirements. The City of Dickson Planning Commission reserves the right to require traffic studies and/or pavement design based on the proposed improvement.

4.104 Private Streets

- 1. Where any ownership, control, and maintenance of any street is proposed to remain in private ownership such streets shall be constructed to the design and construction standards as herein provided. Such streets shall also be inspected by the City of Dickson during their construction so as to insure they are properly built.
- 2. All private roads and improvements shall be maintained by the developer or a legally established homeowners association or other similar group approved by the Planning Commission. An annual assessment shall be made to each property to insure that sufficient funds are available to repair or resurface the private road. The amount of the initial assessment shall be approved by the Dickson Planning Commission. The legal documents establishing the ownership and maintenance of the private road shall be submitted with the final plat and shall be recorded with the final plat.
- 3. Any gated entrance used to access a private street shall be equipped with an emergency switch that requires no key or password or other security device in order to open the gate. This switch shall be clearly visible and labeled as an emergency access device. A pulldown fire alarm type switch is preferred. Exceptions to this requirement may be made if the emergency access device is approved by the Planning Commission and the Dickson Fire Marshal.

4-105 Drainage and Storm Sewers

4-105.1 General Requirements

The Planning Commission shall not approve any plat of a subdivision which does not make adequate provision for storm water or floodwater run-off channels or basins. The storm water drainage system shall be separate and independent from any sanitary sewer system.

4-105.2 Nature of Storm Water Facilities

4-105.201 Location

The subdivider may be required by the Planning Commission to transport by pipe or open ditch any spring or surface water that may exist prior to or as a result of the subdivision. Such drainage facilities shall be located in the street right-of-way, where feasible, or in perpetual unobstructed easements of appropriate width and shall be constructed in accordance with the construction specifications contained in these regulations.

4-105.202 <u>Accessibility to Public Storm Sewers</u>

- a. Where a public storm sewer is accessible, the developer shall install storm sewer facilities, or if no outlets are within a reasonable distance, adequate provision shall be made for the disposal of storm waters, subject to the specifications of the appropriate governmental representative; inspection of facilities shall be conducted to assure compliance. Inspection of facilities shall be conducted by the enforcing officer.
- b. If a connection to a public storm sewer will be provided eventually, as determined by the Planning Commission, the subdivider shall make arrangements for future storm water disposal by a public system at the time the plat receives final approval. Provisions for such connection shall be incorporated by inclusion in the performance bond required for the final subdivision plat.

4-105.203 Accommodation of Upstream Drainage Areas

A culvert or other drainage facility shall in each case be large enough to accommodate potential runoff from its entire upstream drainage area, whether inside or outside the subdivision. Necessary facilities shall be sized based on the construction specifications and assuming conditions of maximum potential watershed development permitted.

4-105.204 Effect on Downstream Drainage Areas

The developer shall also prepare and submit to the city engineer a study of the effect of each subdivision on existing downstream drainage facilities outside the area of the subdivision. The City Planning Commission may require offsite improvements to structures such as culverts or road crossings that are inundated as a result of additional runoff generated by the proposed development.

On site storm water detention proposed to reduce the peak rate of discharge shall not cause increased peak flows or velocities detrimental to downstream properties or facilities. When detention facilities are utilized, the peak rate of discharge after development shall not exceed the predevelopment peak rate with adequate provision made to prevent erosion. Infiltration systems that reduce the volume of runoff are encouraged.

Should it be determined by the city engineer that downstream conditions dictate additional control of additional storms (up to the twenty-five (25) year design storm), the developer shall install flow control devices (weir, etc.), as approved by the city engineer.

Detention facilities shall be platted as perpetual drainage easements and shall be maintained by the property owner or the owners' association, as applicable. The government of the City of Dickson will in no way be responsible for maintenance of drainage facilities on private property. Estimated increases in discharge velocity shall be mitigated by energy dissipation devices where required to prevent erosion.

The drainage system shall be designed to honor natural drainage divides, where practical. Surface waters shall not be concentrated and discharged onto adjoining property at rates and/or velocities exceeding predevelopment conditions unless an easement expressly authorizing such discharge has been granted by the owner of the affected land or unless the discharge is into an adequate natural watercourse or drainage system.

4-105.205 Areas of Poor Drainage

Whenever a plat is submitted for an area which is subject to flooding, the Planning Commission may approve such subdivision; provided, that the applicant fills the affected floodway fringe area of said subdivision to place public way elevations at no more than one (1) foot above the regulatory flood elevation and first floor elévations (including basements) at no less than one (1) foot above the regulatory flood elevation. The plat of such subdivision shall provide for a floodway along the bank of any stream or watercourse of width sufficient to contain or move the water of the regulatory flood, and no fill shall be placed in the floodway; neither shall any building nor flood-restrictive structure be erected or placed therein. The boundaries of the floodway and floodway fringe area, and the regulatory flood elevation, shall be determined by the city engineer based upon the review specified in Subsection 2-103.2, of these regulations, and the submission of flood data in construction plans as specified in Section 5-103, of these regulations. In the event that such data is unavailable, the developer shall cause such studies to be made by a consulting engineer experienced in riverine

hydrology and hydraulics. The study shall be subject to review and approval by the city engineer.

When sinkholes are encountered, the limits of any standing water shall be determined by the developer based upon competent engineering. The Planning Commission may prohibit construction in and around sinkholes. Any alteration of a sinkhole or the drainage pattern shall be approved by the city engineer and Planning Commission. (See Subsection 4-102.502.) Additionally, any permits required by the State of Tennessee shall be obtained for work affecting a sinkhole.

4-105.206 Riparian Buffers

A 25' riparian buffer strip along all blueline streams is required. Note that State of Tennessee or other governing body may require a larger riparian buffer strip. This 25-feet wide buffer shall be measured from the top of bank on the side of the proposed development.

4-105.207 Storm Water Detention and Discharge Control

- a. The policy of the Dickson Municipal Planning Commission is to require that there be no post development increase in storm water resulting from the development of any subdivision within the City of Dickson.
- b. Any drainage system which discharges without some form of detention shall route its water along a designated public drainage easement. A drainage system can be allowed to discharge along an existing (prescriptive) but nonrecorded easement if all of the following are true:
 - (i) Post-development flow is less than or equal to the pre-development flow at the same location. (See Subsection 4-105.204.)
 - (ii) In order to prevent erosion at all outlet points, the engineer will be required to design and submit for approval an outlet system that approximates the width and velocity of the flow which existed prior to development.

4-105.3 <u>Dedication of Drainage Easements</u>

4-105.301 General Requirements

Where a subdivision is traversed by a watercourse, drainageway, channel, or stream, there shall be provided a storm water easement or drainage right-of-way conforming substantially to the lines of such watercourse and of such width and construction as will be adequate. Where open drainageways are utilized they shall be designed for the twenty-five (25) year frequency flood.

4-105.302 Drainage Easements

- a. Where topography or other conditions are such as to make impracticable the inclusion of drainage facilities within a street right-of-way, perpetual unobstructed easements at least ten (10) feet in width for such facilities shall be provided across property outside the street lines and with satisfactory access to streets. Easements shall be indicated on the preliminary and final plats. Drainage easements shall be carried from the street to a natural watercourse or to other drainage facilities. Easement widths shall be sufficient to contain any planned drainage facilities.
- b. When a new drainage system is to be constructed which will carry water across private land outside the subdivision, appropriate drainage rights must be secured and indicated on the plat.
- c. The applicant shall dedicate, when required by the Planning Commission, either in fee, or by drainage or conservation easement, the land on both sides of an existing watercourse to a distance to be determined by the Planning Commission.
- d. Along watercourses, low-lying lands within any floodway, as determined by the Planning Commission pursuant to Section 2-103, of these regulations, whether or not included in areas for dedication, shall be preserved and retained in their natural state as drainage ways.

4-105.303 <u>Drainage Construction</u>

All ditch, channelization, culvert, storm drain, or catch basin construction shall be governed by the Specifications for Drainage Construction, included as Appendix B. These specifications are adopted and made a part of these regulations.

4-106 Water Facilities

All public water systems shall be installed as per the requirements and after approval of the Water Authority of Dickson County.

4-106.2 Fire Hydrants

Fire hydrants shall be required in all subdivisions; they shall be located no more than one thousand (1000) feet apart by street or so that no building envelope (whether residential, commercial, or industrial) shall be more than five hundred (500) feet from any fire hydrant as measured by the servicing street. However, the Planning Commission may require closer spacing where physical conditions or types of structures so warrant. Likewise, the Planning Commission may ask that the City Fire Marshall recommend the spacing and location of fire hydrants for developments that utilize the cluster development provisions of the Zoning Ordinance, for commercial subdivisions, for planned developments, or for multi-family

developments. To eliminate future street cuttings or openings, all underground utilities for fire hydrants, together with the fire hydrants themselves, and all other water supply improvements shall be installed before any final paving of a street shown on the subdivision plat.

Where four (4) or more lots are being subdivided along existing public ways and adequate water lines are available, (six (6) inches in diameter or greater), fire hydrants shall be installed and color coded in cooperation with the appropriate utility district. See Appendix C, for Color Code Standard.

4-107 Sewage Facilities

4-107.1 **General Requirements**

The applicant shall install sanitary sewer facilities in a manner prescribed by the regulations of the Tennessee Department of Environment and Conservation and by any other applicable standards and specifications. All plans shall be designed and approved in accordance with the rules, regulations, specifications, and standards, of any applicable governmental agency or appropriate unit, thereof. All public sewer facilities shall be submitted to and approved by the Water Authority of Dickson County.

4-107.2 Mandatory Connection to Public Sewer System

1. When public sanitary sewers are within reasonable access of the subdivision, as determined by the Planning Commission, the subdivider shall provide sanitary sewer facilities to each lot therein and shall connect the facilities to the public system. The subdivider shall provide sewers which meet standards set forth in the regulations of the Tennessee Department of Environment and Conservation.

4-107.3 Individual Disposal System Requirements

If public sewer facilities are not available and individual disposal systems are proposed, lot areas shall not be less than the minimums specified in these regulations; all pertinent soil absorption tests shall be made as directed by the county environmentalist and the results submitted to the local office of the State Department of Environment and Conservation for approval.

The individual disposal system, including the size of the septic tank and size of the tile fields or other secondary treatment device, also shall be approved by the local office of the State Department of Environment and Conservation.

Upon recommendation of the local office of the State Department of Environment and Conservation, the Planning Commission may prohibit installation of sewage disposal facilities requiring soil absorption systems where such systems will not function due to high ground water, flooding, or unsuitable soil characteristics. The Planning Commission may require that the subdivider note on the face of the plat and any deed of conveyance that soil absorption fields are prohibited in designated areas.

4-107.4 Design Criteria for Sanitary Sewers

All public sanitary sewer systems shall be installed as per the design requirements of the Water Authority of Dickson County and only after their approval.

- All sanitary sewer facilities located in a flood hazard area shall be floodproofed to the regulatory flood protection elevation. All sewerage facilities located below the regulatory flood protection elevation shall be designed to prevent infiltration of floodwaters into the sewer system and discharges from the system into floodwaters.
- 2. No manholes shall be located closer to the top of a bank of a stream than the width of such stream from bank to bank.

4-108 Pedestrian Ways

4-108.1 <u>Sidewalks and Bicycle Paths</u>

Sidewalks and bicycle paths, where required by the Planning Commission, shall be included within the dedicated nonpavement right-of-way of all streets as indicated in the following table and shall be improved as required by Subsection 4-103.4, of these regulations. Concrete curbs are required for all streets where sidewalks are to be constructed. A median strip of grassed or landscaped area at least two (2) feet wide shall separate all sidewalks from adjacent curbs.

SIDEWALK DESIGN					
Class of Street	Sidewalk Width				
Nonresidential Road (Industrial, Commercial)	6 Feet Wide				
Residential Road					
Minor Street Other Thoroughfares	5 Feet Wide 6 Feet Wide				

4-108.2 Pedestrian Accesses

The Planning Commission may require, in order to facilitate pedestrian access from the street to schools, parks, playgrounds, or other nearby streets, perpetual unobstructed easements at least twenty (20) feet in width. Easements shall be indicated on the plat.

4-109 <u>Utility Easements</u>

A. Easements down rear lot lines or additionally across lots, if deemed necessary by the Planning Commission, shall be provided for utilities (private or public). Such easements shall be at least ten (10) feet wide,

except for across-lot easements which shall be at least twenty (20) feet wide. The subdivider shall take such actions as are necessary to ensure the coordination and continuation of utility easements established on adjacent properties with those proposed within his development.

- B. Where topographical or other conditions are such as to make impractical the inclusion of utilities within rear lot lines, perpetual unobstructed easements at least ten (10) feet in width shall be provided along side lot lines with satisfactory access to streets or rear lot lines. Easements shall be indicated on the plat.
- C. Temporary construction easements exceeding the width of permanent easements may be required as necessary until completion of any one project.

4-110 Public Uses

4-110.1 Plat to Provide for Public Uses

Whenever a tract to be subdivided includes a school, recreation use, a portion of a major street, or other public use, as indicated on the land development plan and/or major street or road plan, or any portion thereof, such tract shall be suitably incorporated by the developer into his plat when first presented for review by the Planning Commission.

After proper determination of its necessity by the Planning Commission and the appropriate governmental representative(s) involved in the acquisition and use of such site, and after a determination has been made to acquire the site by the public agency, the site shall be suitably incorporated by the developer into the plat prior to final approval by the Planning Commission and recording of the plat.

4-110.2 Referral to Public Body

The Planning Commission shall refer any plat presented in accordance with Subsection 4-110.1, to the public body concerned with acquisition of the land. The Planning Commission may propose alternate areas for such acquisition and shall allow the appropriate governmental agency thirty (30) days for reply.

Among the areas which the Planning Commission may propose for public acquisition, when the commission deems it appropriate and consistent with the policies and purposes set forth in Section 1-104, Subsections 2-101.4, 4-101.4, and Section 4-111, of these regulations, is any land within a floodway or floodway fringe determined according to the procedure described in Section 2-103, of these regulations.

The acquiring agency's recommendation, if affirmative, shall include a map showing the boundaries and area of the parcel to be acquired and an estimate of the time required to complete the acquisition.

4-110.3 Notice to Property Owner

Upon receipt of an affirmative report, the Planning Commission shall notify the property owner and shall designate on all plats any areas proposed to be acquired by any public body. Upon such designation by the Planning Commission, any reserved portion of any floodway or floodway fringe shall not be altered from its natural state by the development in any manner whatsoever, except upon written approval of the Planning Commission.

4-110.4 <u>Duration of Land Reservation</u>

The acquisition of land reserved by a governmental agency on the final plat shall be initiated within twenty-four (24) months of notification, in writing, from the owner that he intends to develop the land. Such letter of intent shall be accompanied by a plat of a proposed development and a tentative schedule of construction. Failure on the part of the governmental agency to initiate acquisition within the prescribed twenty four (24) months shall result in the removal of the "reserved" designation from the property involved and the freeing of the property for development in accordance with these regulations.

4-111 Preservation of Natural Features and Amenities

Existing features which would add value to residential development or to the planning region as a whole, such as trees, watercourses and falls, historic spots, and similar irreplaceable assets, shall be preserved in the design of the subdivision, as required by the Planning Commission. No trees shall be removed from any subdivision nor any change of grade of land effected until approval of a preliminary subdivision plat has been granted. All trees on the plat required to be retained shall be preserved, and all trees, where required, shall be welled and protected against change of grade. When required the preliminary plat shall show the number and location of existing trees and shall indicate all those marked for retention.

4-112 Nonresidential Subdivisions

4-112.1 **General**

If a proposed subdivision includes land which is zoned for a commercial or industrial purpose, or if not zoned, includes land intended by the applicant as a commercial or industrial use, the layout of the subdivision with respect to such land shall make such provisions as the Planning Commission may require. A nonresidential subdivision also shall be subject to all the requirements of site plan approval set forth in any zoning ordinance. Site plan approval may proceed simultaneously at the discretion of the Planning Commission. A nonresidential subdivision shall be subject to all the requirements of these regulations, as well as, such additional standards set forth by the Planning Commission, and shall conform to the proposed land use plan, major thoroughfare plan, and zoning ordinance.

4-112.2 Standards (Amended by Resolution 2011-1, January 18, 2011)

In addition to the principles and standards in the regulations, which are appropriate to the planning of all subdivisions, the subdivider shall demonstrate to the satisfaction of the Planning Commission that the street, parcel, and block pattern proposed is specifically adapted to the uses anticipated and takes into account other uses in the vicinity. The following principles and standards shall be observed:

- 1. proposed industrial parcels shall be suitable in areas and dimensions to the types of nonresidential development anticipated;
- 2. street rights-of-way and pavements shall be adequate to accommodate the type and volume of traffic anticipated; roadway classification and associated minimum standard typical sections are included in Appendix B. These typical roadway sections represent the minimum standard including base stone and pavement requirements. The City of Dickson Planning Commission reserves the right to require traffic studies and/or pavement design based on the proposed improvement.
- special requirements may be imposed by the governing body with respect to any street, curb, gutter, and sidewalk design and construction specifications;
- 4. special requirements may be imposed by the governing body with respect to the installation of public utilities, including water, sewer, and storm water drainage;
- 5. every effort shall be made to protect adjacent residential areas from potential nuisance from the proposed nonresidential subdivision, including the provision of extra depth in parcels backing on existing or potential residential development and provisions for permanently landscaped buffer strips, when necessary; and
- 6. Roads carrying nonresidential traffic, especially trucks, normally shall not be extended to the boundaries of adjacent existing or potential residential areas.

4-113 Street Lighting

A street lighting plan shall be required by the Planning Commission during the Construction Plan stage of any major development, however, subject to any design standards of the Dickson Power Board. The Power Board shall review such lighting plan and make recommendation to the City Council for final approval. Such lighting may be decorative or standard lighting fixtures.

(added by Resolution No. 2010-1, May 18, 2010)

ARTICLE V

SPECIFICATIONS FOR DOCUMENTS TO BE SUBMITTED

5-101 Sketch Plat

5-101.1 General

Sketch plats submitted to the Office of Planning and Zoning, prepared in pen or pencil, shall be drawn to a scale of one hundred (100) feet to one (1) inch.

5-101.2 Features

The sketch plat shall show:

- 1. a scale drawing of the property and the names of the owners of adjoining property;
- 2. size of the original tract(s) being subdivided;
- 3. notation of any existing legal rights-of-way or easements, or other encumbrances affecting the property;
- 4. approximate topography of the site, at no more than five (5) foot intervals, extended into adjacent properties;
- 5. any areas which may be affected by flooding;
- 6. general public way and lot patterns;
- 7. proposed phasing, if any;
- 8. vicinity map of property;
- 9. date and approximate north point;
- 10. name of owner;
- 11. name of plat designer; and
- 12. zoning classification.

5-102 **Preliminary Plat**

5-102.1 General

The preliminary plat shall be prepared by a surveyor engaged in the practice of land surveying at a scale of one hundred (100) feet to one (1) inch. The plat may be prepared in pen or pencil, and the sheets shall be numbered in sequence if more than one sheet is used. The map prepared for the preliminary plat may be used for the final subdivision plat and should be permanently reproducible.

5-102.2 Features

The preliminary plat shall include:

- 1. the location of the property to be subdivided with respect to surrounding property(s) and public way(s);
- 2. the names of all adjoining property owners of record, or the names of adjoining developments;
- the names of adjoining public ways;
- 4. the location and dimensions of all boundary lines of the property, figured to the nearest hundredth (100th) of a foot;
- 5. the location of existing public ways, easements, water bodies, streams, and other pertinent features, such as swamps, railroads, buildings, parks, cemeteries, drainage ditches, and bridges, as determined by the Planning Commission;
- 6. the location and width of all existing and proposed easement, alleys, and other public ways, and building setback lines;
- 7. the location, dimension, and area of all proposed or existing lots;
- 8. culverts, driveway tiles, associated drainage structures sized along with necessary easements; electrical and telephone easements;
- 9. the position of all existing or proposed buildings within proposed condominium developments;
- 10. the location and dimension of all property proposed to be set aside for park or playground use or other public or private reservation, with designation of the purpose thereof, and conditions, if any, of the dedication or reservation:
- 11. flood map reference number and date; the limits of floodway and floodway fringe areas and the associated regulatory flood elevation and regulatory flood protection elevation, as determined according to flood maps or flood studies as required;
- 12. the name and address of the owner(s) of land to be subdivided, the subdivider if other than the owner, and the land surveyor or other person preparing the plat;
- 13. the date of the plat, approximate true north point, scale, and title of the subdivision;
- 14. sufficient data to determine readily the general location, bearing, and length of all lines necessary to reproduce such lines upon the ground;

- 15. name of the subdivision and all new public ways, as approved by the Planning Commission;
- 16. the zoning classification of all zoned lots, as well as an indication of all uses other than residential proposed by the subdivider;
- 17. the approximate distance and bearing of one of the corners of the boundary of the subdivision to the nearest intersection of existing public ways and to the original corner of the original survey of which it is a part;
- 18. key map showing relation of the subdivision to all public ways, railroads, and water courses in all directions to a distance of at least one-half (1/2) mile (suggested scale: one (1) inch to one thousand (1,000) feet);
- 19. contours at vertical intervals of not more than two (2) feet where the proposed subdivision has an average slope of five (5) percent or less, or at vertical intervals of not more than five (5) feet where the average slope exceeds five (5) percent (contours to be field surveyed or taken from aerial photographs acceptable to the Planning Commission) where new road and drainage construction is involved;
- 20. map parcel numbers as recorded on the land tax maps of the county;
- 21. The following notations:
 - (a) explanation of drainage easements;
 - (b) explanation of site easements;
 - (c) explanation of reservations; and
 - (d) for any lot where public sewer or water systems are not available, the following:
 - (i) areas to be used for sewage disposal and their percolation results, or if the Planning Commission desires, any other acceptable data to show that the site can be served effectively by septic tanks;
 - (ii) water wells (existing and proposed); and
 - (iii) rock outcroppings, marshes, springs, sinkholes, natural storm drains, and other outstanding topographical features;
- 22. a form for endorsement of Planning Commission approval of the preliminary plat which shall read as follows:

Approved by the Dickson Municipal Planning Commission, with such exceptions or conditions as are indicated in the minutes of the Commission on _____.

date

Preliminary plat approval shall not constitute final approval for recording purposes.

5-103 Construction Plans

5-103.1 General

Construction plans shall be prepared for all improvements required by these regulations. Plans shall be drawn at a scale of no more than fifty (50) feet to an inch. Plans shall be in compliance with the specifications in Article IV, of these regulations. Approval of plans must precede actual construction, and no final plat shall be considered by the Planning Commission until the required plans have been approved. The construction plans shall be prepared and stamped by a licensed engineer engaged in the practice of civil engineering. Design calculations for drainage, structures, and special construction items will be submitted for review.

5-103.2 Features

The following shall be shown on the construction plans.

- 1. Profiles showing existing and proposed elevations along center lines of all public ways.
- 2. Where a proposed road intersects an existing public way or ways, the elevation along the center line of the existing public way within one hundred (100) feet of the intersection and sight illustrating adequate sight distance.
- 3. Approximate radii of all curves, lengths of tangents, and central angles on all public ways.
- 4. Proposed public ways, as required by the Planning Commission; where such are required, horizontal stationing shall be at fifty (50) foot intervals and cross-sectional elevations shall be to an accuracy of one tenth (1/10) foot vertical on a line at right angles to the center line of the public way at the following points: the center line of the public way, each property line, and points twenty-five (25) feet inside each property line.
- 5. Plans and profiles indicating the locations and typical cross-section of public way pavements, including curbs and gutters, sidewalks, drainage easements, rights-of-way, manholes, and catch basins.
- 6. The location of public way signs.
- 7. The location, size, and invert elevations of existing and proposed sanitary sewers, stormwater drains, and fire hydrants, showing

- connection to any existing or proposed utility system. Utilities parallel to, or crossing, the proposed roadways shall also be shown in the road profiles.
- 8. Exact location and size of all water, gas, electric poles, lighting, or other underground utilities or structures. (amended by Resolution No. 2010-1, May 18, 2010)
- 9. Location, size, elevation, and other appropriate description of any existing facilities or utilities, including but not limited to, existing public ways, sewers, drains, water mains, easements, water bodies, streams, and other pertinent features, such as swamps, railroads, buildings, and features noted on the land development plan or major street or road plan.
- 10. The water elevations of adjoining lakes or streams and the approximate high- and low-water elevations of such lakes or streams shall be shown. All elevations shall be referred to the U.S.G.S. datum plane.
- 11. If the subdivision borders a lake, river, or stream, the distance and bearings of a meander line established not less than twenty (20) feet back form the ordinary high-water mark of such waterways.
- 12. The developer shall prepare for any portion of a subdivision containing a flood prone area, or an area known to be subject to flooding, information necessary for the Planning Commission to determine the suitability of the particular site for the proposed development, as follows:
 - (a) plans in triplicate drawn to scale showing the nature, location, dimensions, and elevation of any part of the subdivision within a flood prone area; existing or proposed structures or building sites, fill, storage of materials and floodproofing measures, as specified in these regulations; and the relationship of the above to the location of the stream channel, floodway, floodway fringe, the regulatory flood elevation, and the regulatory flood protection elevation;
 - (b) a typical valley cross-section showing the channel of the stream, elevation of land areas adjoining each side of the channel, cross-sectional areas to be occupied by the proposed development, and high-water information, if required by the Planning Commission;
 - (c) surface-view plans showing elevations and contours of the ground as well as any area inundated by the base flood (100- year);
 - (d) pertinent structures, fill, or elevations of public ways;
 - (e) water supply, sanitary facilities, soil types, and other pertinent information, as required by the Planning Commission; and

- (f) specifications for building construction and materials, flood proofing, filling, dredging, grading, storage of materials, water supply, and sanitary facilities.
- 13. Contours at the same vertical interval as on the preliminary plat.
- 14. In addition to the other requirements of this section, construction plans for condominium subdivisions shall contain "as built" drawings of all underground utilities, regardless of proposed ownership, and the construction design of all public facilities which are proposed for dedication to the governing body.
- 15. A notation of construction plans approval by appropriate persons or governmental representatives.
- 16. Title, name, address, stamp and signature of engineer who prepared the plans.
- 17. Date of plans, including any revision dates.
- 18. An erosion and sediment control plan shall be prepared for each development required to submit construction plans. Such plan shall demonstrate the manner in which the general principals for erosion and sediment control set out in Subsection 4-102.603, are to be implemented on the site covered by the construction plans. This provision applies regardless of the acreage of the proposed subdivision.

5-104 Final Subdivision Plat

5-104.1 General

The final subdivision plat shall be prepared on transparent drafting material at a scale of one hundred (100) feet to one (1) inch, on sheets of county register plat book size. The use of an appropriate smaller scale may be permitted for lots larger than two (2) acres. When more than one (1) sheet is required, an index sheet of the same size shall be filed showing the entire subdivision with the sheets numbered in sequence.

Construction plans, if required as described in Section 5-103, of these regulations, shall have been approved prior to Planning Commission approval of the final subdivision plat.

5-104.2 Features

The final plat shall include:

- 1. The location of the property to be subdivided with respect to surrounding property(s) and public ways.
- 2. The names of all adjoining property owners of record or the names of adjoining developments.
- The names of adjoining public ways.

- 4. The exact boundary lines of the tract, determined by a field survey, showing angles to the nearest minute and distance to the nearest one hundredth (1/100) of a foot. The adjusted accuracy of the survey shall meet or exceed the standards set forth in Title 62, Chapter 18, of the Tennessee Code, for a Category II (Suburban Subdivision). The survey shall be tied into the Tennessee Grid Coordinate System if a controlled monument is located within one-fourth (1/4) mile to any point of the property.
- 5. The location of all public ways, easements, water bodies, large streams or rivers, railroads, parks, and cemeteries.
- 6. Flood map reference number and date; the limits of floodway and floodway fringe areas and the regulatory flood elevation and regulatory flood protection elevation; as determined by the Planning Commission.
- 7. The location and width of all easements and rights-of-way for public ways, as well as the building setback lines on all lots.
- 8. The location, dimensions, and area of all lots. All dimensions shall be field run to the nearest one hundredth of a foot and angles to the nearest minute. Lot areas shall be shown to the nearest tenth of a square foot.
- 9. The location, area, and dimensions, to the accuracy set forth in Item 8, above, of all property to be set aside for park or playground use or other public or private reservation, with a designation of the purpose thereof, and conditions, if any, of the dedication or reservation.
- 10. The final plat of a condominium subdivision shall contain, in addition to the other information required by this section:
 - (a) a proposed building location and boundary survey, to "American Land Title Association" or other similar standards, showing complete and accurate dimensions and angles of the boundary of the parcel(s) on which the condominium is located, together with exterior dimensions and locations relative to those boundaries of the building(s) which constitute the condominium subdivision. When existing buildings are being subdivide "as built" surveys shall be submitted;
 - (b) some sort of datum plane or other suitable vertical location reference. In meeting these requirements, it is only necessary that the upper and lower limits of each level of each condominium unit be identified specifically in relation to the vertical reference, (e.g., an appropriate permanent monument or other acceptable reference datum or fixed known point). Elaborate exterior elevations and architectural detail are not necessary to satisfy this requirement;

- (c) copies of deed covenants, the charter and By-Laws of any Homeowners' Association established; and special information which the Planning Commission may require to protect the rights of future owners of the condominium or the public in general.
- 11. The name and address of the owner(s) of the land being subdivided.
- 12. The name and address of the subdivider if other than the owner.
- 13. The name and stamp of the land surveyor or other person preparing the plat.
- 14. The date of the plat, approximate true north point, scale, and title of the subdivision.
- 15. Sufficient data to determine readily the location, bearing, and length of all lines necessary to reproduce such lines upon the ground. This shall include the radius, central angle, and tangent distance for the center line of the curved public ways and curved property lines that are not the boundary of curved public ways. The location of all monuments and pins shall be indicated on the plat.
- 16. The names of all public ways.
- 17. The zoning classification of all lots, as well as an indication of uses other than residential proposed by the subdivider.
- 18. The total acreage within the subdivision.
- 19. Lot numbers, where required.
- 20. The line size and location of water and sewer facilities.
- 21. The location of all fire hydrants.
- 22. The diameter and width of all driveway culverts.
- 23. For any lot where public sewer or water system is not available, the following shall be shown:
 - (a) areas to be used for sewage disposal; and
 - (b) water wells (existing and proposed).
- 24. Applicable certifications in the form reproduced in this section shall appear upon the final plat. All required certificates shall bear the signature of the approving or authorizing agent at the time of application for final plat approval, except that the form for endorsement of the Planning Commission's approval for recording shall appear unsigned at the time of application for approval.

- 25. State Department of Environment and Conservation, public water and sewer design layout and approval stamps, if applicable; also, actual design plans for filing in appropriate governmental representative's office.
- 26. Commitment notes may be printed or stamped on the final plat reflecting location and dimension of easements, or extent of other agreements or factual data, in lieu of drafted illustration, when applicable, and as approved by the Planning Commission.

5-104.3 Plat Certificates

1. Certification showing that the applicant is the landowner; that he offers for dedication public ways, rights-of-way, and any site for public use; and that he consents to the subdivision plan.

CERTIFICATE OF OWNERSHIP AND DEDICATION

	shown and described here, Page, Dickson hereby adopt this plan cestablish the minimum be	I am (we are) the owner(s) of the property eon as evidenced in Book Number County Registers Office, and that I (we) f subdivision with my (our) free consent uilding restriction lines, and that offers of or all public ways, utilities, and other					
	, 20_						
	Date , 20_	Owner					
2.	Title (if acting for partnership or corporation) Certification by a registered land surveyor as to the accuracy of the land survey.						
	CERTIFIC	ATE OF SURVEY ACCURACY					
	belief this is a true and	to the best of my (our) knowledge and accurate survey of the property shown ass "" Land Survey as defined in ennessee Code, and that the ratio of equal to 1:					
	. 20						

3. Certification by appropriate governmental or quasi-governmental official(s) that sewage disposal and/or water system(s) has/have been installed.

CERTIFICATE OF APPROVAL OF WATER SYSTEM

I hereby certify that the water system(s) outlined or indicated on the final subdivision plat entitledhas/have been installed in accordance with current local and state government requirements, or a sufficient bond or other surety has been filed to guarantee said installation.
Date Name, Title and Agency or Authorized Approving Agent
CERTIFICATE OF APPROVAL OF SEWER SYSTEMS
I hereby certify that the sewer systems outlined or indicated on the final subdivision plat entitledhave been installed in accordance with current local and state government requirements or a sufficient bond or cash has been filed which will guarantee said installation.
Sewer System,20
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/o attached restrictions.
Before the initiation of construction, the location of the house of other structures and plans for the subsurface sewage disposal system shall be approved by the local health authority.
, 20 Date Local Health Authority
Certification on the final plat by appropriate governmenta representative that the subdivider has complied with one of the
following:

(a) installation of all public way improvements in accordance with the requirements of these regulations; or

4.

(b) in lieu of compliance with subdivision improvement requirements, certification that surety has been posted by the subdivider in an amount approved by appropriate governmental representative to guarantee completion of all improvements.

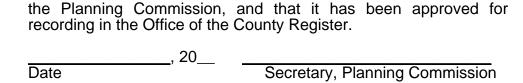
CERTIFICATE OF APPROVAL OF PUBLIC WAYS FOR BOND POSTING
I hereby certify: (1) that all designated public ways on this fina subdivision plat have been installed in an acceptable manner and according to the specifications of the Dickson Subdivision Regulations, or (2) that a performance bond or other surety has been posted with the city to guarantee completion of all required improvements in case of default.
Date Appropriate Governmental Representative
For a subdivision containing common open space or facilities certification on the final plat of dedication of common areas in accordance with procedures established in these regulations.
CERTIFICATION OF COMMON AREAS DEDICATION
in recording this plat has designated certain areas of land shown hereon as common areas intended for use by the homeowners within
areas of land shown hereon as common areas intended for use by the homeowners
areas of land shown hereon as common areas intended for use by the homeowners within (Name of Subdivision) for recreation and related activities. The above described areas are not dedicated for use by the general public, but are dedicated to the
areas of land shown hereon as common areas intended for use by the homeowners within (Name of Subdivision) for recreation and related activities. The above described areas are not dedicated for use by the general public, but are dedicated to the common use of the homeowners within the named subdivision. "Declaration of Covenants and Restrictions," applicable to the above named subdivision, is hereby incorporated and made a part

5.

6. Certification on the final plat of Planning Commission approval for recording of the plat.

CERTIFICATE OF APPROVAL FOR RECORDING

I hereby certify that the subdivisions plat shown hereon has been found to comply with the Dickson Subdivision Regulations, with the exception of such variances, if any, as are noted in the minutes of



- 7. Notation of Possible Flooding -- If any portion of the land being subdivided is subject to flooding as defined in these regulations, a notation shall be made on the plat that development or modification of the land within any floodway delineated within plat is prohibited and that development within floodway fringes delineated on the plat shall be done in such a manner that any structure shall be protected against flood damage to at least the regulatory flood protection elevation, which elevation shall be stated in the notation. Any additional restrictions imposed by the Planning Commission upon development within flood prone areas also shall be indicated on the plat.
- 8. <u>Notation of Health Restrictions</u> -- Any modifications or limitations which may be imposed by the state or county health department shall be clearly indicated on the plat.
- 9. Notation of Private Restrictions -- Private restrictions and trusteeships and their periods of existence shall be indicated on the plat. Should these restrictions or trusteeships be of such length as to make their lettering impracticable and thus necessitate the preparation of a separate instrument, reference to such instrument shall be made on the plat or, if the restrictions and trusteeships are of record, the plat shall note where they are recorded.

5-105 Form of Dedication Offer

The form of the offer of irrevocable dedication, required by Subsection 2-104.1, Item 5, of these regulations, shall be as reproduced in this section and approved by the city attorney. The form may be modified as required by the city attorney.

Copies of this form may be obtained at the office of the enforcing officer.

FORM FOR OFFER OF IRREVOCABLE DEDICATION

AGREE!	MENT made 1 , a , Te	hisda	y of having	its office	, 20 e and pla	by and	between iness at
WHERE	AS, the Dicksor	n Municipal Pla	anning Co	mmissior	n is in the p	process of a	
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the Unit	HEREFORE, in ted States paid ration, it is mutua	by the city	to the de	veloper			
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B.	The developer be accepted by			offer of d	edication is	irrevocable	and can
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FORM FOR OFFER OF IRREVOCABLE DEDICATION, cont'd

(CORPORATE SEAL)

ATTEST: BY			FOR THE	COUNTY	OF DICKS	ON
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CORPOR	RATE					
STATE OF TENNESSEE						
(COUNTY OF	_)	SS.:			-	
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affixed to said instrument is such authority of the Board of Directors of by like order and authority.				so affixed	by order	
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ARTICLE VI

DEFINITIONS

6-101 Usage

- A. For the purpose of these regulations certain numbers, abbreviations, terms, and words used herein shall be used, interpreted, and defined as set forth in this article.
- B. Unless the context clearly indicates to the contrary, words used in the present tense include the future tense and words used in the plural include the singular; the word "herein" means "in these regulations"; and the word "regulations" means "these regulations".
- C. A "person" includes a corporation, a partnership, and an unincorporated association of persons, such as a club; "shall" is always mandatory; a "building" or "structure" includes any part thereof; "used" or "occupied", as applies to any land or building, shall be construed to include "intended, arranged, or designed to be used or occupied".

6-102 Words and Terms Defined

<u>Alley</u> -- A public or private right-of-way primarily designed to serve as secondary access to the side or rear of those properties whose principal frontage is on some other street.

<u>Applicant</u> -- The owner of land proposed to be subdivided or his authorized representative. Consent shall be required from the legal owner of the premise(s).

<u>Architect</u> -- An architect or landscape architect certified and registered by the State Board of Architectural and Engineer Examiners pursuant to Title 62, Chapter 2, <u>Tennessee Code</u>, to practice in Tennessee.

<u>Arterial Street or Road</u> -- A major public way intended to move traffic to and from major industrial areas or a route for traffic between communities or large areas and which has an average daily traffic count in excess of three thousand (3,000).

<u>Block</u> -- A tract of land bounded by public ways or by a public parks, cemeteries, railroad rights-of-way, or shorelines or waterways or a combination of such.

<u>Bond</u> -- An instrument with a clause, with a sum of money fixed as a penalty, binding the parties to pay the same: conditioned, however, that the payment of the penalty may be avoided by the performance by some one or more of the parties of certain acts.

<u>Building</u> -- Any structure built for the support shelter, or enclosure of persons, animals, chattels, or movable property of any kind; the term includes a mobile home.

<u>Capital Improvements Program</u> -- A proposed schedule of future projects, listed in order of construction priority, together with cost estimates and the anticipated means of financing each project. All major projects requiring the expenditure of public funds, over and above the annual local government operating expenses, for the purchase, construction, or replacement of the physical assets of the community are included.

<u>Collector Street or Road</u> -- A major public way intended to move traffic from local ways to arterial routes. Collector routes serve a neighborhood or large subdivision(s), and normally have an average daily traffic count ranging from one thousand and one (1,001) to three thousand (3,000).

<u>Common Elements</u> -- Any portion of a condominium which is held in common by owners of condominium units. These elements may be either general common elements or limited common elements, as defined below.

<u>General Common Elements</u> -- Any of the common elements of a condominium which are held in joint ownership by all owners of the condominium.

<u>Limited Common Elements</u> -- Any of the common elements of a condominium which are reserved for use by the owner of a particular condominium unit or group of units.

<u>Condominium</u> -- A form of ownership of less than the whole of a building or system of buildings under the provisions of Title 66, Chapter 27, <u>Tennessee Code</u>, which provides the mechanics and facilities for formal filing and recoordination of divided interests in real property, whether the division is vertical or horizontal.

<u>Condominium Subdivision</u> -- The subdivision of property through the establishment of a condominium or horizontal property regime.

<u>Horizontal Condominium Subdivision</u> -- A subdivision where each unit occupies some ground space.

<u>Vertical Condominium Subdivision</u> -- A subdivision of a multi-story building in which one (1) or more units do not occupy ground space.

<u>Condominium Unit</u> -- A space conveyed by separate title and located within a condominium structure.

<u>Construction Plan</u> -- The maps or drawings accompanying a subdivision plat and showing the specific location and design of improvements to be installed in the subdivision in accordance with the requirements of the Planning Commission.

<u>Contractor</u> -- An individual, firm, or corporation with whom an owner or authorized agent has executed a work agreement.

<u>County Environmentalist</u> -- An agent designated to administer local and/or state health regulations.

<u>Cul-de-sac</u> -- A minor street having only one outlet and having an appropriate terminal for the safe and convenient reversal of traffic movement; definition includes: dead end, turn-around, or turn-about.

<u>Design Specifications</u> -- Written descriptions of a technical nature of materials, equipment, construction systems, standards, and workmanship required for a project intended for local government ownership or maintenance.

<u>Developer</u> -- The owner of land proposed to be subdivided or his authorized representative.

<u>Dwelling Unit</u> -- A room, or rooms connected together constituting a separate, independent housekeeping establishment for owner occupancy, rental or lease on a daily, weekly, monthly, or longer basis; physically separated from any other room(s) or dwelling units which may be in the same structure; and containing independent cooking and sleeping facilities.

<u>Easement</u> -- Authorization by a property owner for the use by another, for a specified purpose, of any designated part of his property.

<u>Enforcing Officer</u> -- The building inspector or such person designated by the chief executive officer to be responsible for enforcing the provisions of these regulations.

<u>Engineer</u> -- An engineer certified and registered by the State Board of Architectural and Engineer Examiners pursuant to Title 62, Chapter 2, <u>Tennessee Code</u>, to practice in Tennessee.

Equal Degree of Encroachment -- The delineation of floodway limits so that floodplain lands on both sides of a stream are capable to conveying a proportionate share of flood flows. This is determined by considering the hydraulic conveyance of the floodplain along both sides of a stream for a significant reach.

<u>Escrow</u> -- A fiduciary agreement with the local government in lieu of actual performance and intended to assure performance. An escrow account may be provided as a bond subject to agreement of the Planning Commission.

External Subdivision Boundary -- All points along the periphery of a subdivision.

<u>Final Subdivision Plat</u> -- The final map or drawing and accompanying materials, described in these regulations, on which the subdivider's plan of the subdivision is presented to the Planning Commission for approval and which, if approved by the commission, is recorded with the county register of deeds.

<u>Flood</u> -- A temporary rise in stream level that results in inundation of areas not ordinarily covered by water.

<u>Flood Frequency</u> -- The statistically determined average for how often a specific flood level or discharge may be equaled or exceeded.

<u>Flood Hazard Boundary Map</u> -- An official map on which the boundaries of the floodplain areas having special flood hazards have been delineated.

<u>Flood Hazard or Flood Prone Area</u> -- The maximum area of the floodplain that, on the average, is likely to be flooded once every one hundred (100) years (i.e., that has a one (1) percent chance of being flooded in any year).

<u>Floodplain</u> -- A land area adjoining a river, stream watercourse, bay, or lake which is likely to be flooded. It is composed of a floodway and floodway fringe.

<u>Floodplain Management Program</u> -- The overall program of corrective and preventive measures for reducing flood damage, including but not limited to emergency preparedness plans, flood control works, building code regulations, health regulations, zoning ordinance regulations, and these subdivision regulations.

<u>Flood Profile</u> -- A graph showing the water surface elevation or height or a particular flood event for any point along the longitudinal course of a stream. The flood profile is determined through the use of standard open-channel hydraulic calculations.

<u>Floodproofing</u> -- Any combination of structural and nonstructural additions, changes, or adjustments to properties and structures which reduce or eliminate potential flood damage to lands; water facilities, sanitary facilities, and other utilities; structures; and contents of buildings; and which prevent pollution of floodwaters from such natural or man-made sources.

<u>Floodway</u> -- The stream channel and adjacent overbank areas required to carry and safely discharge the 100-year flood without increasing flood levels more than one foot above natural flood levels.

<u>Floodway Encroachment Limits</u> -- The lines marking the limits of floodways on official federal, state, and local floodplain maps.

<u>Floodway Fringe</u> -- The area adjoining a watercourse which, although not lying within a floodway, has been or may hereafter be covered by a 100-year flood.

<u>Frontage</u> -- That side of a lot abutting a public way ordinarily regarded as the front of the lot. It shall not be considered as the ordinary side of a corner lot.

<u>General Plan</u> -- The official statement of the Planning Commission which sets forth major policies concerning future development of the jurisdictional area and meeting the provisions set forth in Section 13-4-201 thru 203, <u>Tennessee Code</u>.

<u>Governmental Agency</u> -- Any public body other than the governing body.

Governing Body -- The chief legislative body of any government.

<u>Governmental Representative</u> -- An outside person or designated local official or employee authorized to act on behalf of the governing body in making determinations regarding legal, public works, planning, community development, or other public business.

<u>Grade</u> -- The slope of a public way specified in percentage terms.

<u>Highway, Limited Access</u> -- A freeway or expressway providing a trafficway for through traffic, in respect to which owners or occupants of abutting property(s) or lands and other persons have no legal right of access to or from the trafficway, except at such points and in such manner as may be determined by the public authority having jurisdiction over such trafficway.

<u>Horizontal Property Act</u> -- "The Tennessee Horizontal Property Act" as codified in Title 66, Chapter 2, <u>Tennessee Code</u>.

<u>Individual Sewage Disposal System</u> -- A septic tank, seepage tile sewage disposal system, or any other sewage treatment device other than a public treatment system approved by the appropriate governmental representative.

<u>Internal Subdivision Boundary</u> -- All points within a subdivision which do not constitute external boundaries.

<u>Joint Ownership</u> -- Joint ownership among persons shall be construed as the same owner for the purpose of imposing subdivision regulations.

<u>Jurisdictional Area</u> -- Planning boundary(s) established in keeping with Sections 13-4-101 thru 105, 13-4-201thru 203, and 13-4-301 thru 308, Tennessee Code.

<u>Land Development Plan</u> -- An element of the general plan which sets out a plan or scheme of future land usage.

<u>Land Surveyor</u> -- A land surveyor certified and registered by the State Board of Land Survey Examiners pursuant to Title 62, Chapter 18, <u>Tennessee Code</u>, to practice in Tennessee.

<u>Legal Counsel</u> -- The person designated by the governing body to provide legal assistance for the administration of these and other regulations.

<u>Lot</u> - A tract, plot, or portion of a subdivision or parcel of land intended as a unit for the purpose, whether immediate or future, or transfer of ownership, or for building development.

<u>Lot, Corner</u> -- A lot situated at the intersection of two (2) public ways.

<u>Lot Improvement</u> -- Any building, structure, place, work of art, or other object or improvement of the land on which they are situated constituting a physical betterment of real property, or any part of such betterment.

<u>Major Street or Road</u> -- A public way which is classified as a collector or arterial public way according to these regulations or by the major street or road plan for the jurisdictional area.

Major Street or Road Plan -- The plan adopted by the Planning Commission, pursuant to Section 13-4-302, <u>Tennessee Code</u>, showing, among other things, "the general location, character, and extent of public ways...(and) the removal, relocation, extension, widening, narrowing, vacating, abandonment or change of use of existing public ways..."

<u>Major Subdivision</u> -- All subdivisions not classified as minor subdivisions including but not limited to subdivisions of five (5) or more lots or subdivisions of any size requiring any new or improved road, the extension of government facilities, or the creation of any public improvements, or containing any flood prone area.

Minor Collector Street -- A public way with an average daily traffic count of less than 1,000 and an average daily truck count of 7% or less. Length of a minor commercial street is 1,000 feet or less and configured to prevent expansion to a collector or above. (Added by Resolution 2011-1, January 18, 2011)

Minor Street or Road -- A public way which is not classified as an arterial or collector.

<u>Minor Subdivision</u> -- Any subdivision containing less than five (5) lots fronting on an existing public way; not involving any new or improved public way, the extension of public facilities, or the creation of any public improvements, and not in conflict with any provision of the adopted general plan, major street or road plan, zoning ordinance, or these regulations.

National Flood Insurance Program -- A program established by the U.S. Government in the National Flood Insurance Act of 1968, and expanded in the Flood Disaster Protection Act of 1973, in order to provide a flood insurance at rates made affordable through a federal subsidy in local political jurisdictions which adopt and enforce floodplain management programs meeting the requirements of the National Flood Insurance Program regulations. The program regulations are found at 24 Code of Federal Regulations, Chapter X, Subchapter B.

Off Site -- Any premise not located within the area of the property to be subdivided, whether or not in the same ownership of the applicant for subdivision approval.

One Hundred-Year Flood -- A flood having an average frequency of occurrence of once in 100 years, although it may occur in any year. It is based on statistical analysis of stream flow records available for the watershed and analysis of rainfall and runoff characteristics in the general region of the watershed.

Owner -- Any person, group of persons, firm or firms corporation or corporations, or any other legal entity having legal title to or sufficient proprietary interest in the real property.

Performance Bond -- See "Bond".

<u>Perimeter Street</u> -- Any existing street to which the parcel of land to be subdivided abuts on only one side.

<u>Planning Commission</u> -- A public planning body established pursuant to Title 13, Chapters 2 or 5, <u>Tennessee Code</u>, to execute a partial or full planning program within authorized area limits.

<u>Preliminary Plat</u> -- The preliminary drawing or drawings, described in these regulations, indicating the proposed manner of layout of the subdivision to be submitted to the Planning Commission for approval.

<u>Premise(s)</u> -- A tract of land together with any buildings or structures which may be thereon.

<u>Public Improvement</u> -- Any drainage ditch, roadway, parkway, sidewalk, pedestrian way, tree, lawn, off-street parking area, lot improvement, or other facility for which the local government may ultimately assume the responsibility for maintenance and operation or which may affect an improvement for which government responsibility is established.

<u>Public Way</u> -- Any publicly owned street, alley, sidewalk, or lane right-of-way which provides for movement of pedestrians or vehicles.

<u>Reach</u> -- A hydraulic engineering term to describe longitudinal segments of a stream or river. A reach generally includes the segment of the flood hazard area where flood heights are influenced by a man-made area where flood or natural obstruction. In an urban area, the segment of a stream or river between two (2) consecutive bridge crossings typically would constitute a reach.

Regulatory Flood -- The one hundred-year flood.

<u>Regulatory Flood Protection Elevation</u> -- The elevation of the regulatory flood plus one foot of freeboard to provide a safety factor.

<u>Resubdivision</u> -- A change in a map of any approved or recorded subdivision plat altering the number of lots incorporated within the confines of the original plat.

<u>Right-of-Way</u> -- A strip of land occupied or intended to be occupied by a public way crosswalk, railroad, electric transmission line, oil or gas pipeline, water main, sanitary or storm sewer line, or for another special use. The usage of the term "right-of-way", for land platting purposes, shall mean that every right-of-way hereafter established and shown on a final plat is to be separate and distinct from the lots or parcels adjoining such right-of-way and shall not be included within the dimensions or areas of such lots or parcels.

<u>Sale or Lease</u> -- Any immediate or future transfer of ownership, including contract of sale or transfer, of an interest in a subdivision or part thereof, whether by metes and bounds, deed, contract, plat, map, or other written instrument.

<u>Same Ownership</u> -- Ownership by the same person, corporation, firm entity, partnership, or unincorporated association or ownership by different corporations, firms, partnerships, entities, or unincorporated associations, in which a stockholder, partner, associate, or a member of his family owns an interest in each corporation, firm, partnership, entity, or unincorporated association.

<u>Setback</u> -- The distance between a building wall and the nearest public way right-of-way.

<u>Sketch Plat</u> -- A sketch preparatory to the preliminary plat (or final subdivision plat, in the case of minor subdivisions).

<u>Special Flood Hazard Map</u> -- The official map designated by the Federal Insurance Administrator to identify floodplain areas having special flood hazards.

<u>Staff Assistant to the Planning Commission</u> -- The person(s) employed by the local governing body to assist the Planning Commission in planning and land use regulation activities.

<u>Start of Construction</u> -- For purposes of subdivision control any alteration of the original surface area of the land, from and after the date of adoption of these regulations.

<u>Structure</u> -- Anything constructed above or below ground.

<u>Subdivider</u> -- Any person who (1) having an interest in land, causes it, directly or indirectly, to be divided into a subdivision or who (2) directly or indirectly, sells, leases, or develops, or offers to sell, lease, or develop, or advertises for sale, lease, or development, any interest, lot, parcel site, unit, or plot in a subdivision or who (3) engages, directly or indirectly, or through an agent in the business of selling, leasing, developing, or offering for sale, lease, or development a subdivision or any interest, lot, parcel site, unit, or plot in a subdivision or who (4) is directly or indirectly controlled by or under direct or indirect common control with any of the foregoing.

<u>Subdivision</u> -- "Subdivision" means the division of a tract or parcel of land into two (2) or more lots, sites, or other divisions requiring new street or utility construction, or any division of less than five (5) acres 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 resubdividing or to the land or area subdivided. (See Section 13-4-301, <u>Tennessee Code</u>.)

<u>Subdivision Agent</u> -- Any person who represents or acts for or on behalf of a subdivider or developer in selling, leasing, or developing or offering to sell, lease, or develop any interest, lot, parcel, unit, site, or plot in a subdivision, except in an instance where only legal counsel is provided.

<u>Temporary Improvement</u> -- Any improvement built and maintained by a subdivider during construction of the subdivision and prior to release of the surety for completion of required improvements.

<u>Twenty-Five Year Flood</u> -- A flood having an average frequency of occurrence of once in twenty-five (25) years.

<u>Water Surface Elevation</u> -- The heights in relation to mean-sea-level expected to be reached by floods of various magnitudes and frequencies at pertinent points in the floodplain. Also the level of natural flows or collectors or water which may be expected to be found above or below surface.

Zoning Ordinance or Resolution -- A statute, legally adopted pursuant to Title 13, Chapters 4 or 7, <u>Tennessee Code</u>, for the purpose of regulating by district, land development or use for a designated area.

ARTICLE VII

ADOPTION OF REGULATIONS AND AMENDMENTS

7-101 Original Enactment

In order that land shall be subdivided in accordance with the objectives and standards set forth in these regulations, these subdivision regulations are hereby adopted this 17th day of June 2008, and immediately shall be in full force and effect. Pursuant to Section 13-4-403, Tennessee Code, a public hearing was held on these regulations June 17th, 2008, at 6:00 p.m., in Dickson, Tennessee, notice of which was given by publication in The Shopping News, on May 20, 2008.

<u>Donnie Faulkner</u>
Chairman, Dickson Planning Commission

<u>June 17, 2008</u>
Date

ATTEST:

<u>Jason Pilkinton</u>
Secretary, Dickson Planning Commission

<u>June 17,2008</u>
Date

ARTICLE VII

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Don E. Kulk

6-17-08 Date

ATTEST:

Secretary, Jason Pilkinton

Date

APPENDICES

APPENDIX A FORMS

DICKSON MUNICIPAL PLANNING COMMISSION

Form Number 1

PRELIMINARY PLAT CHECKLIST

NAME OF SU	UBDIVISION
LOCATION	ZONING DISTRICT
OWNER	
ENGINEER (OR SURVEYOR
1.	copies of plat.
2.	Location of property with respect to surrounding property and streets.
3.	Names of all adjoining property owners, or names of adjoining developments.
4.	Contours at not more than five (5) foot intervals.
5.	Location and dimensions of all boundary lines of the property to the nearest one hundredth (1/100) of a foot.
6.	Location and names of existing streets.
7.	Location of existing easements and utilities.
8.	Location of existing water bodies, streams, and other pertinent features, such as swamps, railroads, buildings, parks, cemeteries, drainage ditches, bridges, etc.
9.	Locations, dimensions, and areas of all proposed or existing lots.
10.	Location and dimensions of all property proposed to be set aside for park or playground use or other public or private reservation, with designation of the purpose thereof, and conditions, if any, of the dedication or reservation.
11.	Flood Map number and date.
12.	Date of Plat.
13.	Appropriate true north point.
14.	Scale of plat.
15.	Plans of proposed utility layout.
16.	Data from which the location, bearing, and length of all lines can be determined and reproduced on the ground.

Form Number 1 **Preliminary Plat Checklist** Page 2 Names, locations and dimensions of proposed streets and _____17. easements. ____18. Indication of the use of any lot and all uses other than residential. ____19. Lots numbered. APPROVED:____ DATE **CONDITIONS: DISAPPROVED:** DATE **FOLLOWING REASONS:**

Dickson Municipal Planning Commission

SIGNED:

SECRETARY OF PLANNING

COMMISSION

DICKSON MUNICIPAL PLANNING COMMISSION

Form Number 2

FINAL PLAT CHECKLIST

NAME OF S	UBDIVISION
LOCATION	ZONING DISTRICT
OWNER _	
ENGINEER	OR SURVEYOR
1.	copies of plat.
2.	Location of property with respect to surrounding property and streets.
3.	Names of all adjoining property owners, or names of adjoining developments.
4.	Reproducible original.
5.	Location and dimensions of all boundary lines of the property to the nearest one hundredth (1/100) of a foot.
6.	The size and location of any water and sewer mains.
7.	Location of existing easements and utilities.
8.	Location of all existing and proposed fire hydrants.
 9.	Lots numbered.
10.	Names of new streets.
11.	Locations, dimensions, and areas of all proposed or existing lots with building setbacks.
12.	Location and dimensions of all property proposed to be set aside for park or playground use or other public or private reservation, with designation of the purpose thereof, and conditions, if any, of the dedication or reservation.
13.	Flood Map number and date.

Dickson Municipal Planning Commission Form Number 2 Final Plat Checklist Page 2

14.	Date.
15.	Appropriate true north point.
16.	Data from which the location, bearing, and length of all lines can be determined and reproduced on the ground.
17.	Location and description of all proposed monuments.
18.	Performance Bond:
	Water
	Sewer
	Streets
	Miscellaneous
19.	Plat Certificates:
	Ownership and Dedication
	Accuracy
	Utility Systems Water Sewer
	Approval by County Health Department
	Approval of Streets
	Approval or directs Approval for Recording
	Approvarior Necording

<u>Forms of Performance Bond</u> -- The form of the performance bond, required by Section 2-104.1, Item 7, and Chapter 3, of these regulations, shall be as one of those (Forms Number 3 and 4) reproduced in this section and approved by the city attorney.

Copies of these forms may be obtained at the office of the chief enforcing officer.

DICKSON MUNICIPAL PLANNING COMMISSION

Form Number 3

PERFORMANCE BOND

KNOW ALL MEN BY THE	SE PRESENTS	S, That We,		
as Principals,		, State	of	
and the			INSURANCE	COMPANY,
a	_ Corporation	authorized to do	business in	the State of
Tennessee, having		•		
City of Dickson as oblig				
Dollars (\$)	lawful money	of the United	States, for t	he payment
whereof to the Obligee, the executors, administrators, these presents:				
SIGNED, SEALED, AND DA	TED, This	_ day of		_, 20
WHEREAS, application was approval of a " the City of Dickson on by the Dickson Municipal which is that a performan (\$) is to be f local governing body to grabove.	subdivision Planning Coruce bond amou	shown _", filed with the, 20, said nmission upon c unt of Planning Commiss	on plat chief enforcing final plat being ertain conditions	entitled ng officer of ng approved ions, one of Dollars epted by the
NOW, THEREFORE, THE C named principal shall withi for one (1) year only bey recommendation of the Plai truly make and perform improvements in said si specifications and the re obligation is to be void; oth	n one (1) year or ond this perion on this perion on the commission in the contract in the cont	from the date here od by the local g sion with the cons improvements an accordance with	eof (time may poverning bode ent of the par d construction the local	be extended dy upon the ties) will and on of public government

Dickson Municipal Planning Commission Form Number 3 Performance Bond Page 2

It is hereby understood and agreed that in the event that any required improvements have not been installed as provided by said resolution, within the term of this performance bond, the governing body may thereupon declare this bond to be in default and collect the sum remaining payable thereunder, and upon receipt of the proceeds thereof, the local government shall install such improvements as covered by this bond and commensurate with the extent of building development that has taken place in the subdivision but not exceeding the amount of such proceeds.

	Principal	
surance Company		

Dickson Municipal Planning Commission Form Number 3 Performance Bond Page 3

ACKNOWLEDGEMENT: COPARTNERSHIP

STATE OF TENNESSEE
(COUNTY OF)
On this day of, 20, before me personally appeared, to me known and known to me to be one of the firm or, described in and who executed the foregoing
, described in and who executed the foregoing instrument, and he thereupon acknowledged to me that he executed such instrumen as and for the act and deed of said firm.
CORPORATE
STATE OF TENNESSEE
(COUNTY OF) SS.:
On this day of, 20, before me personally appeared, to me known, who, being by me first duly sworn, did depose and say that he resides in; that he is the of, corporation described in and which executed the foregoing instrument; that he knows the corporate seal of said corporation; that the corporate seal affixed to said instrument is such corporate seal that it was so affixed by order and authority of the Board of Directors of said corporation, and that he signed his name thereto by like order and authority.
INDIVIDUAL
STATE OF TENNESSEE
(COUNTY OF) SS.:
On this day of, 20, before me personally appeared to me known and known to me to be the individual described in and who executed the foregoing instrument, and he
acknowledged to me that he executed the same.

DICKSON MUNICIPAL PLANNING COMMISSION

Form Number 4

IRREVOCABLE DOCUMENTARY LETTER OF CREDIT

1.	DATE OF ISSUE
2.	CREDIT NO. OF ISSUING BANK
3.	CREDIT NO. OF ADVISING BANK
4.	ADVISING BANK
5.	ACCOUNTEE
6.	BENEFICIARY, MAIL TO
7.	LATEST PERFORMANCE DATE
8.	LATEST DATE FOR NEGOTIATION
9.	MAXIMUM AMOUNT
10.	We hereby issue this documentary letter of credit in your (the beneficiary's) favor which is available against your drafts at drawn on Bank, Credit No accompanied by the
	following document: A certificate of default signed under oath by the Chairman of the Dickson Municipal Planning Commission and the City of Dickson Mayor certifying that the accountee has not complied with the terms of the agreement between the Planning Commission and the accountee and the amount of approximate damage to the local government, which amount shall be identical to the face amount of the accompanying draft.
11.	SPECIAL CONDITIONS
	We hereby engage with the bona-fide holders of all drafts or documents presented under and in compliance with the terms of this letter of credit that such drafts or documents will be duly honored upon presentation to us.
	The amount of each drawing must be endorsed on the reverse of this letter of credit by the negotiating bank.
	The advising bank is requested to advise this letter of credit without engagement of their part.
	Bank
	Authorized Signature, Issuing Bank
	Authorized Signature, Issuing Bank

Appendix B

Roadway Design Standards And Construction Specifications

I. GENERAL DESIGN STANDARDS

These general design standards are provided for the purpose of providing safe roadways within the City of Dickson. Nothing within these standards relieves the developer or design engineer of the responsibility to provide for the health, safety and welfare of the general public with respect to roadway design and operation. State and national standards developed by the Tennessee Department of Transportation, the Federal Highway Administration, the American Association of State Highway Transportation Officials and the American Society of Civil Engineers may be used to supplement this general guidance document. Deviations from these standards must be supported by appropriate reference from one of the above organizations. The City of Dickson reserves the right to make interpretation of standards.

Construction plans provided for review shall illustrate the design information used for each roadway proposed within the City of Dickson. Roadways shall be labeled to illustrate centerline tangents, intersection angles, curb and right-of-way returns, horizontal curve information, vertical curve information, bridge information, catch basin and storm sewer information, right-of-way location, streams, floodplain and floodway information, adjacent utilities and other information as may be required by the staff and Planning Commission. Plans that are not adequately labeled or do not contain required information will be returned for revision without further review or comment. All elevations depicted on construction plans shall be referenced to the North American Vertical Datum (NAVD88), or latest datum update. A site benchmark shall be shown on all construction plans.

A. DESIGN SPEEDS

Minimum design speeds for streets within the City of Dickson shall be 30 miles per hour unless otherwise approved by the City. Maximum design speeds shall be determined based on the surrounding land use and speed limits of adjoining streets, and should be coordinated with the City of Dickson Public Works Department.

B. INTERSECTIONS

- Angle of intersection roads shall be aligned to intersect as near 90 degrees as possible, but in no case shall the angle of intersection be less than 75 degrees. The angle of intersection shall continue for a distance of not less than 100 feet from the intersection as measured from the right-of-way line of the intersected street.
- 2. Number of streets no more than two streets shall intersect at any point (four approaches to the intersection).
- 3. Offset street intersections street intersections shall not be allowed in which the opposing approaches are not aligned and the offset is less than 150 feet as measured between the approach centerlines.

- 4. Minor streets intersecting collectors and arterials new intersections along collector or arterial streets shall be no less than 800 feet apart.
- 5. Curb radius curb radius shall be no less than 35 feet at minor street collector and arterial streets, or as shown on the Standard Roadway Sections of the City of Dickson. Curb radius and right-of-way radius shall be shown on construction plans submitted for review.
- 6. Sight distance the developer and design engineer shall ensure adequate sight distance at intersections and shall display sight triangles at intersections depicted on the construction plans.
- 7. Landings each intersection shall provide a landing on the minor approaches consisting of a 2% grade for 60 feet as measured from the right-of-way line of the intersected street.

C. DEAD END STREETS

- 1. In general, streets shall be arranged to allow for a continuation between adjoining properties when necessary for movement of traffic, emergency services access, utilities, or in accordance with the major thoroughfare plan. Temporary cul-de-sacs shall be provided, and the right-of-way shall be continued to the property line.
- 2. When the nature of the development requires that a street be dead-end, and its continuation is not required by the Planning Commission, the end of the roadway shall be no closer than 50 feet to the property boundary unless otherwise approved by the Planning Commission. A cul-de-sac shall be provided at the end of the roadway. Cul-de-sacs and dead-end streets shall be limited to the lengths and minimum diameters shown in the table below.

Cul-de-sac Length and Diameter				
Residential Non-Resid				
Right-of-way diameter	100 feet	160 feet		
Pavement diameter	80 feet	140 feet		
Max. length of cul-de-sac				
Temporary	1,000 feet	1,000 feet		
Permanent	1,000 feet	1,000 feet		

D. RIGHT-OF-WAY

 Right-of-way shall be provided as noted in the table below. Additional rightof-way shall be provided in cases of embankment or cut slopes that are necessary for access to maintain the roadway, or for drainage facilities to be used for the conveyance of storm water.

Minimum Width of Right-of-Way (feet)*							
Residential Non-Residential							
Minor Street 50 60							
Collector/Arterial 60 60							
Street							

*Greater widths may be required as noted in paragraph D.1 above.

E. PAVEMENT WIDTHS AND CROWN

- 1. Pavement widths shall be in accordance with the Standard Roadway Sections of the City of Dickson.
- 2. Pavement crown shall be in accordance with the Standard Roadway Sections of the City of Dickson.

F. MAXIMUM ROADWAY GRADES

 Maximum centerline grades for streets in the City of Dickson shall be in accordance with the table shown below. Deviations from these grades shall be subject to approval by the City of Dickson. Consideration of deviations should not be misconstrued to mean acceptance or as precedence, as each case will be considered on its own merits.

Maximum Centerline Grade (%)						
Residential Non-Residential						
Minor Streets 10 6						
Collector Streets 7 6						

G. HORIZONTAL CURVES

1. Minimum centerline radius

- i. Minimum centerline radius for minor streets shall be 100 feet for residential streets and 200 feet for non-residential streets.
- ii. Minimum centerline radius for collector streets shall be 300 feet for residential streets and 300 feet for non-residential streets.
- iii. The minimum radii noted above should only be used if appropriate for the design speed. Higher design speeds may require greater curve radii.

2. Superelevation

i. Horizontal curves shall be superelevated as appropriate to the design speed. Superelevation shall not exceed a rate of 0.08.

H. VERTICAL CURVES

- Vertical curves shall be constructed such that sight and stopping distances are appropriate to the design speed with consideration of driveways and other intersections.
- 2. The following K-values are provided as minimum standards for vertical curves in roadways of the City of Dickson. The K-value is a coefficient by which the algebraic difference in grades may be multiplied to determine the length of vertical curve which will provide minimum sight distance. This does not

relieve the developer/engineer of the responsibility to assure adequate sight and stopping distances. Ref.: <u>A Policy on Geometric Design of Highways and Streets</u>, American Association of State Highway Transportation Officials, Table V-2.

Design Speed (mph)		20	30	40	50
Minimum	Crest	20	30	60-80	110-160
K-values	Curve				
N-values	Sag Curve	20	40	60-70	90-110

3. Vertical curves shall be arranged to minimize the number within the alignment to avoid a "roller coaster" appearance and feel.

I. DRAINAGE SYSTEM DESIGN

1. Storm Sewers

- i. For the purpose of roadway standards, storm sewers are defined as catch basins, area drains, inlets, piping, headwalls and other appurtenances used to collect and transport storm water.
- ii. In general storm sewers shall be designed to accommodate runoff from the tributary drainage area during the occurrence of the 25-year storm. Storm sewer design shall ensure that storms of greater discharge up to the 100-year storm can be accommodated without causing flooding to any dwelling or commercial/industrial structure, regardless of ownership of that structure. This may be accomplished through by-pass overflow.
- iii. Allowable gutter spread for curb and gutter shall be 6 feet. Spacing and size of inlets shall be adjusted to obtain gutter spread equal to, or less than, the allowable value.
- iv. Storm sewer materials shall be in accordance with the construction standards of the City of Dickson.

2. Ditches

i. Ditches shall be designed to accommodate the 50-year storm, and accommodate storms of greater discharge without causing flooding to any dwelling or commercial/industrial structure, regardless of ownership of that structure.

3. Cross drains

i. Cross drains are defined as circular, elliptical or arch culverts designed to convey storm water from one side of a roadway to the other side in

- areas other than a stream crossing or storm water conveyance crossing with a drainage area greater than 100 acres.
- ii. Cross drains shall be constructed of materials as required in the roadway construction standards of the City of Dickson.
- iii. Cross drains shall be designed to convey the 50-year storm, and accommodate storms of greater discharge without causing flooding to any dwelling or commercial/industrial structure, regardless of ownership of that structure.

J. BRIDGES

- For the purpose of these standards, bridges are defined as infrastructure intended to convey traffic from one side of a waterway to the other when crossing a stream or storm water conveyance. Included in this definition are round culverts, box culverts, arch pipes, elliptical pipes, half-arch pipes, span structures and other such types of conveyances intended to allow vehicular or pedestrian traffic to cross the channel.
- 2. Bridges shall be designed and stamped by an engineer licensed in the state of Tennessee. The use of standard materials or standard designs is acceptable, but must be clearly indicated on the construction plans and the appropriate level of construction detail shown to allow staff review of the proposal. The level of detail should increase with the complexity of the structure (i.e., a reinforced concrete box culvert requires more detail than a circular culvert).
- 3. Bridges shall be designed to accommodate HL93 loading as a minimum.
- 4. Bridges shall be hydraulically designed to prevent the increase in base flood elevation resulting from the installation of the bridge.
- 5. Top of road elevation over a bridge shall be no more than 1 foot below the base flood elevation.
- 6. Minimum information shown on the plans shall include the beginning of bridge point, end of bridge point, skew, width, materials, size, section shape, reinforcing, guardrail and/or bridge rail, stream bank armoring, end treatments, and other information as may be required to evaluate the proposal. The bridge shall be shown in plan and profile views.
- 7. All bridges shall receive guardrail and/or bridge rail as appropriate to the type of bridge and geometric design.
- 8. Hydraulic information shall be shown for each bridge structure. Such information shall include, as a minimum, the design storm, design discharge, natural conditions headwater elevation (without bridge), headwater elevation resulting from the bridge, natural conditions water velocity, velocity resulting from the bridge, and roadway overtopping information.
- 9. Bridges shall be designed to protect against scour.
- 10. Design engineers shall provide a "no-rise" certification in accordance with FEMA regulations and procedures for all bridges crossing the regulatory floodway, and for all bridges crossing streams or storm water conveyances with drainage basins of 100 acres or more.

K. GUARDRAIL

1. The developer shall plan and install guardrail in areas of hazard along roadways for the protection of the public. Such areas include roadway embankments with steep foreslopes, bridges, box culverts, overcrossing structures, and roadway embankments over thirty (30) feet in height from the riding surface to the toe of embankment slope. Guardrail shall be placed at locations/conditions normally indicated by TDOT or nationally accepted standards. The City of Dickson reserves the right to specify additional locations in the interest of public safety.

L. PERMITS

- The developer shall be responsible for obtaining all state and federal permits associated with the construction of the planned improvements. Such permits shall include, but may not be limited to, Notices of Coverage for land disturbances, Aquatic Resources Alteration Permits for stream crossings, TVA 26A permits, USACE 404 permits and TDOT roadway/driveway connection permits.
- 2. The developer shall obtain approval of the City of Dickson for roadway and driveway connections to State highways prior to making application to the Tennessee Department of Transportation.
- 3. State and Federal permit approval shall not be misconstrued as a requirement upon the City of Dickson to issue approval of any proposal.

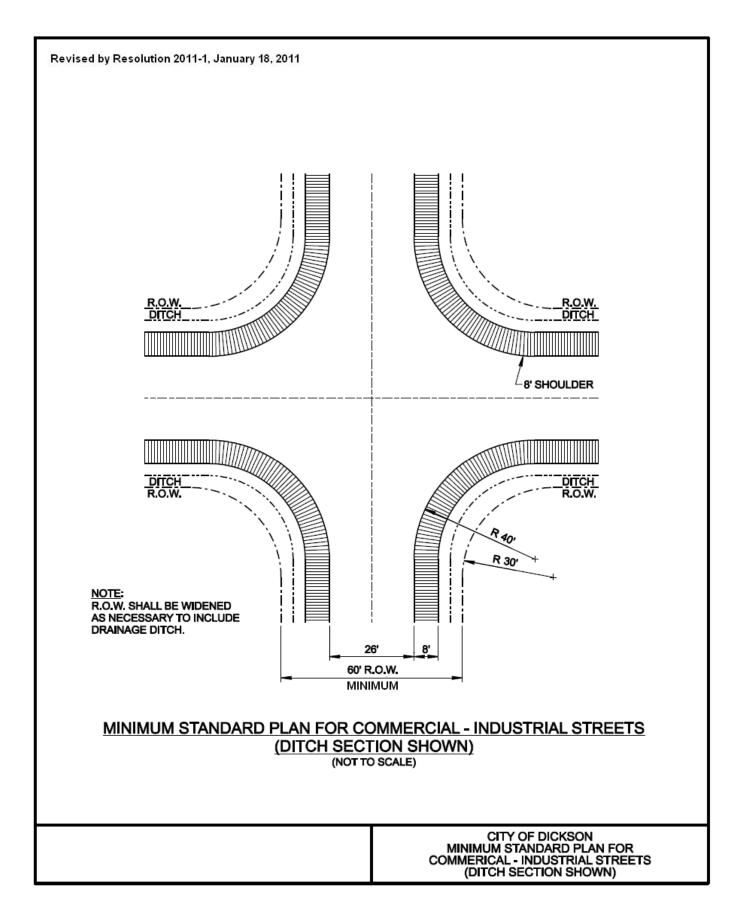
M. AS-BUILT DRAWINGS

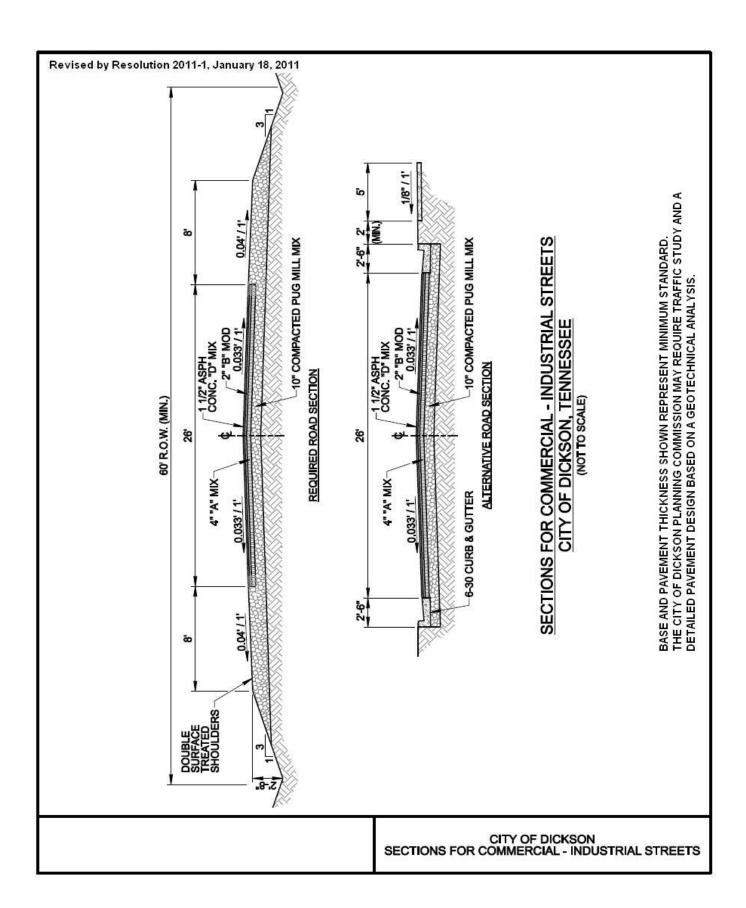
1. Upon completion of construction of the improvements approved by the City of Dickson, the developer shall provide a full-size set of as-built drawings certified by the design engineer whose stamp appears on the construction drawings. The drawings shall bear a statement from the design engineer stating that all construction has been in general conformance with the elevations and grades depicted on the construction plans. Any deviations from the City-approved construction plans shall be indicated on the plans, and fully documented as to scope, nature and reason for the deviation. Any changes that conflict with City standards must be approved by the City prior to construction of the feature. The as-built drawings shall illustrate such features as roadway elevations along the centerline at 100-feet intervals with sufficient information to describe intersections and landings at intersections. The as-built drawings shall also contain the top of grate and invert elevations at catch basins, invert elevations of culverts, ditches, and endwalls, sizes of catch basins, and sizes of pipe culverts and storm sewer pipes. For bridges, whether span-, box culvert-, or circular culvert-type, the as-built plans shall illustrate the top of road elevation, station and elevation at the beginning and ending points of the bridge, invert elevation, low chord elevation, wingwall alignment, extent and elevation, and the extent, type and size of scour protection. The site benchmark shall be shown on the as-built plans.

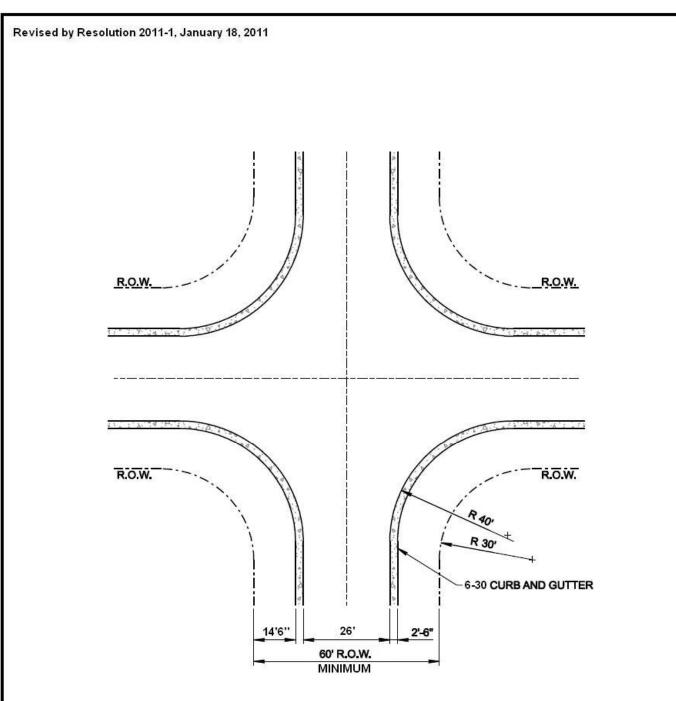
N. STANDARD ROADWAY SECTIONS (Amended by Resolution 2011-1, January 18, 2011)

The following illustrations depict standard roadway designs as required by the City of Dickson.

- -Minimum Standard Plan for Commercial-Industrial Streets (Ditch Section)
- -Sections for Commercial-Industrial Streets
- -Minimum Standard Plan for Commercial-Industrial Streets (Curb & Gutter Section)
- -Sections for Minor Streets
- -Minimum Standard Plan for Minor Streets (Ditch Section)
- -Alternate Curb Detail (Minor Streets)
- -Minimum Standard Plan for Minor Streets (Curb & Gutter Section)
- -Sections for Minor-Commercial Streets
- -Minimum Standard Plan for Minor-Commercial Streets (Ditch Section)
- -Minimum Standard Plan for Minor-Commercial Streets (Curb & Gutter Section)
- -Sections for Collector Streets
- -Minimum Standard Plan for Collector Streets (Ditch Section)
- -Minimum Standard Plan for Collector Streets (Curb & Gutter Section)

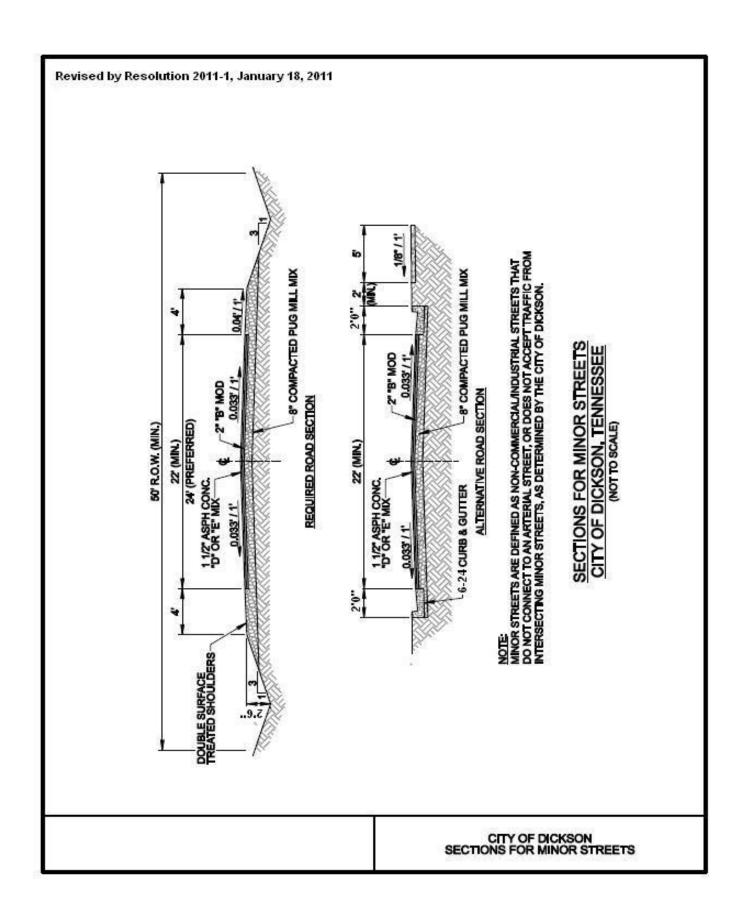


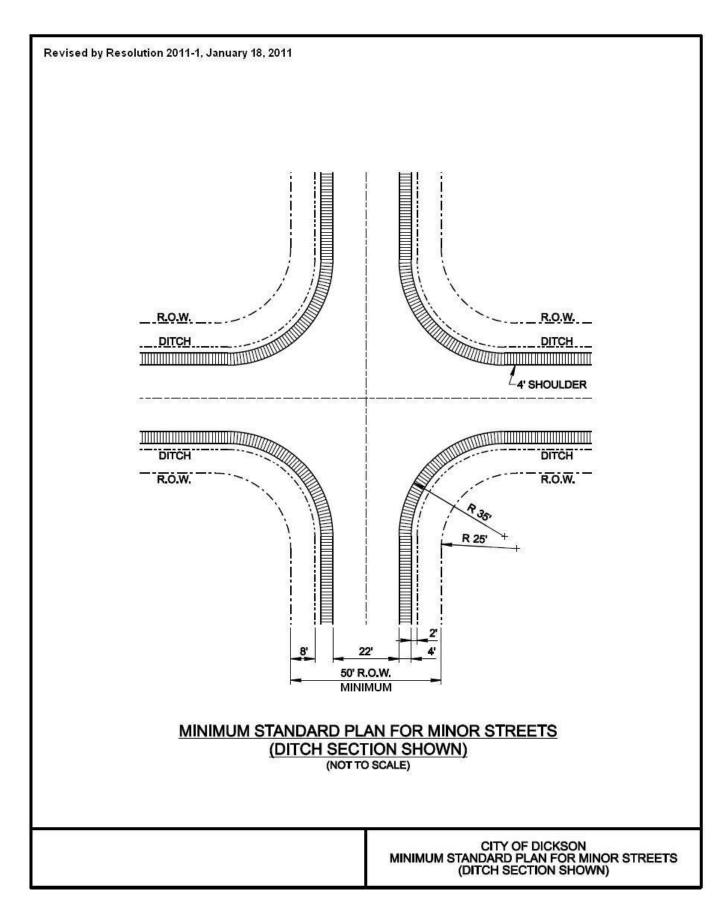


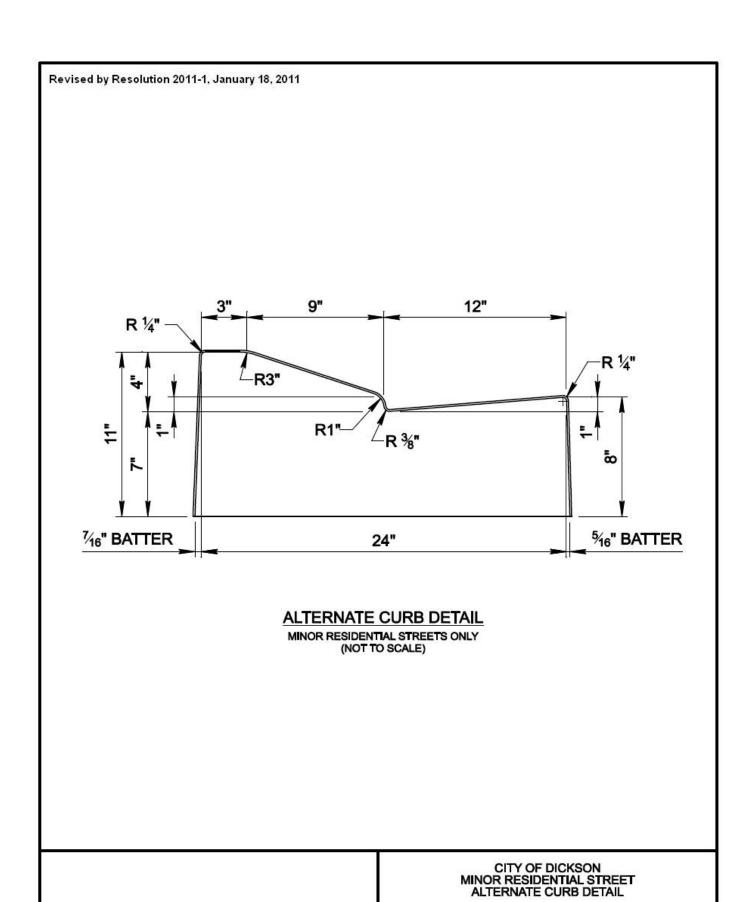


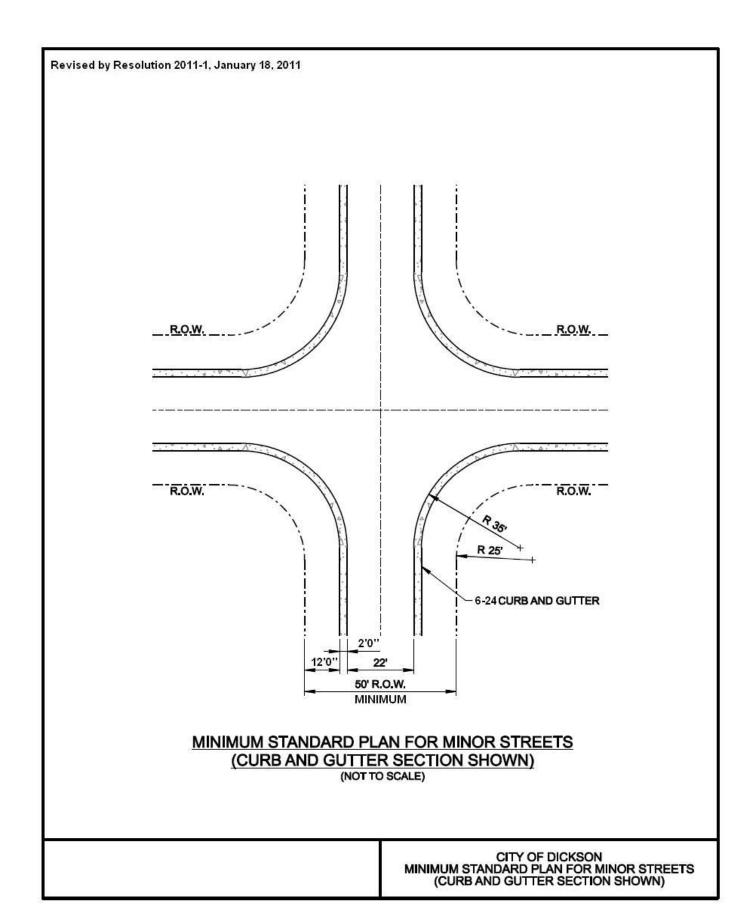
MINIMUM STANDARD PLAN FOR COMMERCIAL - INDUSTRIAL STREETS
(CURB AND GUTTER SECTION SHOWN)
(NOT TO SCALE)

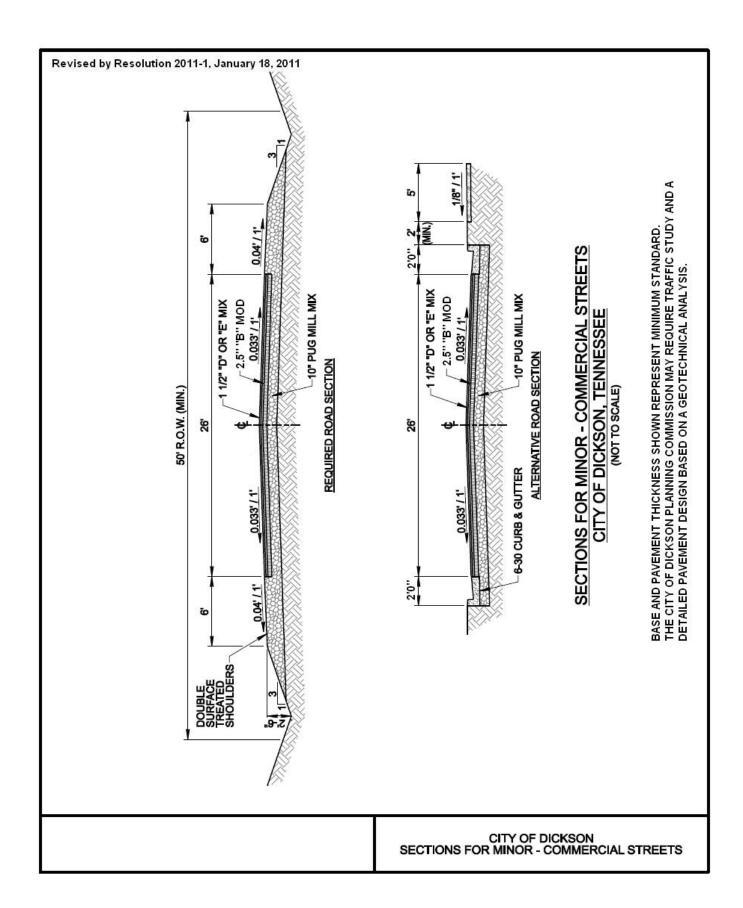
CITY OF DICKSON MINIMUM STANDARD PLAN FOR COMMERCIAL - INDUSTRIAL STREETS (CURB AND GUTTER SECTION SHOWN)

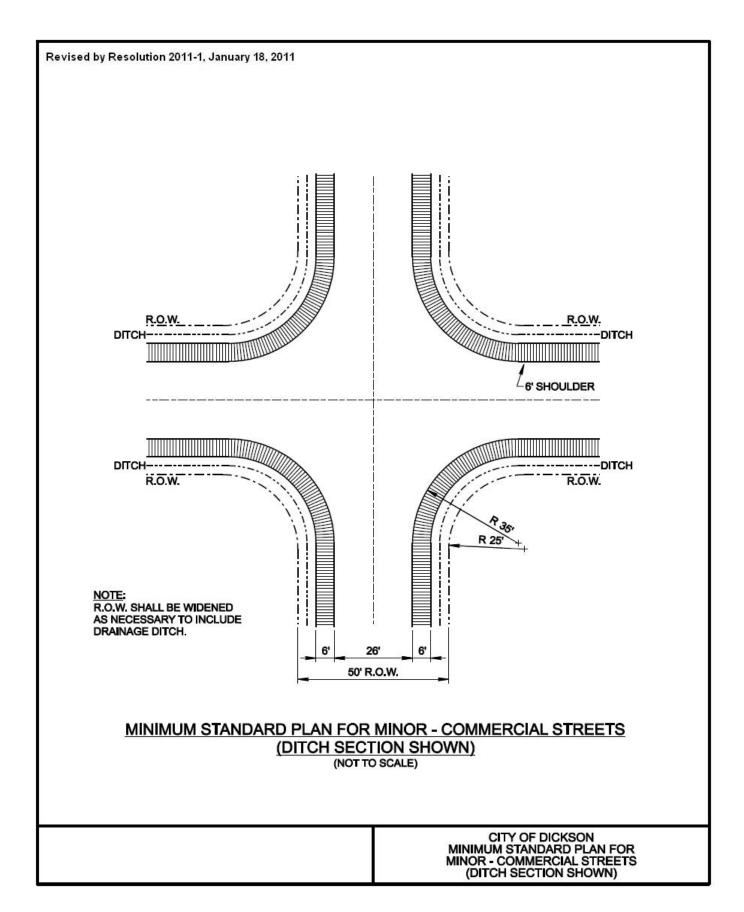


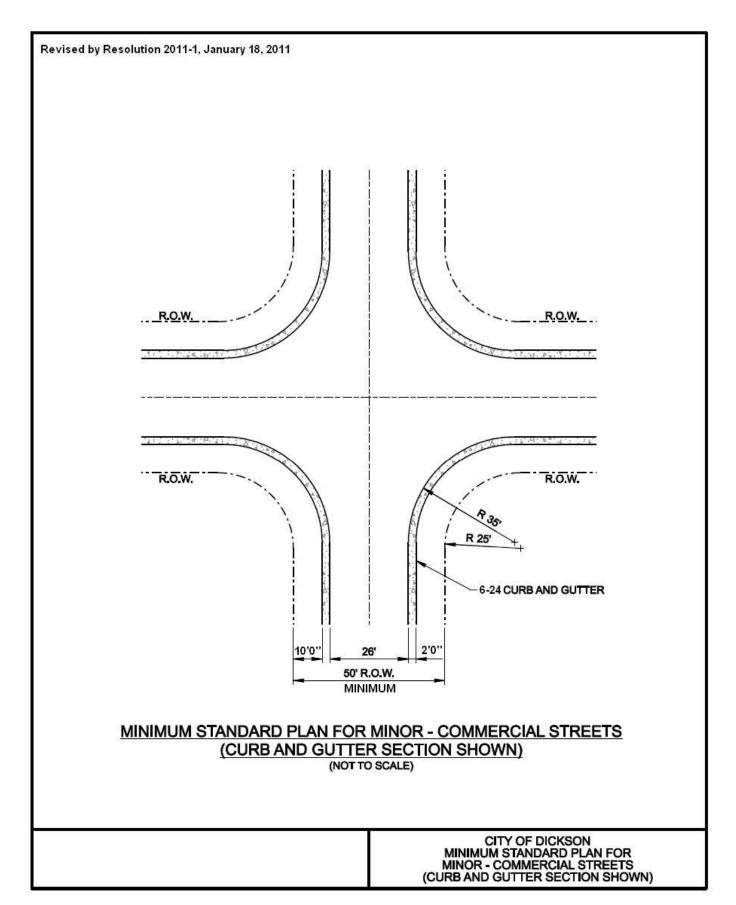


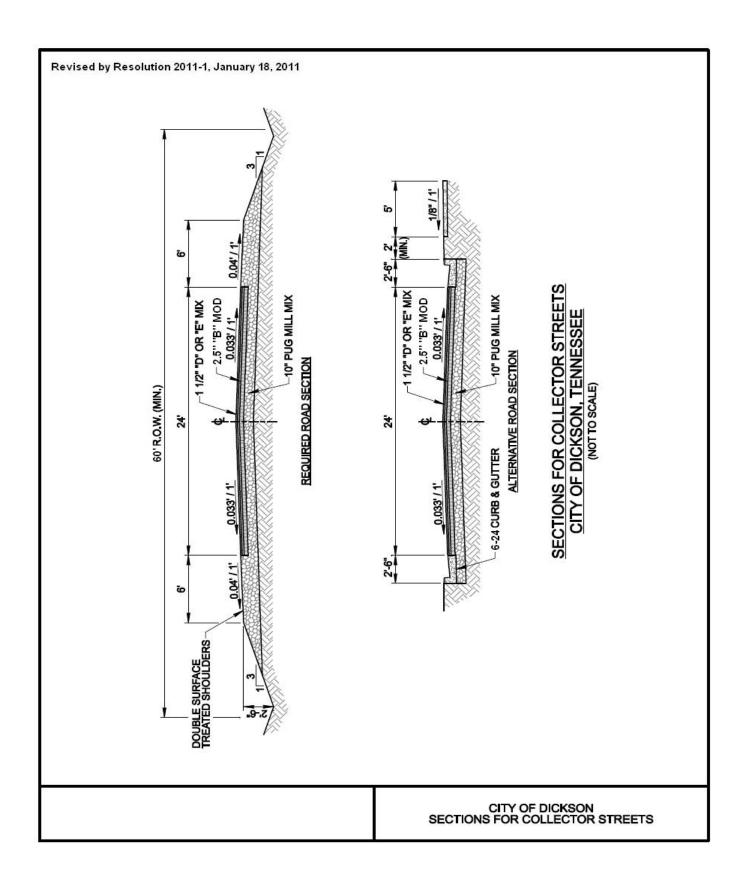


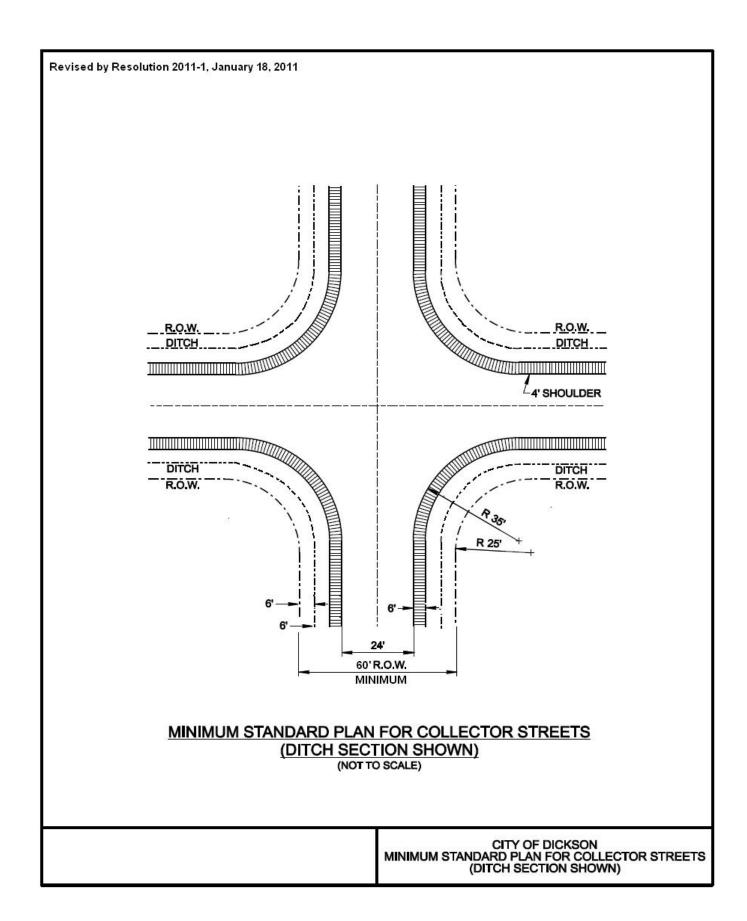


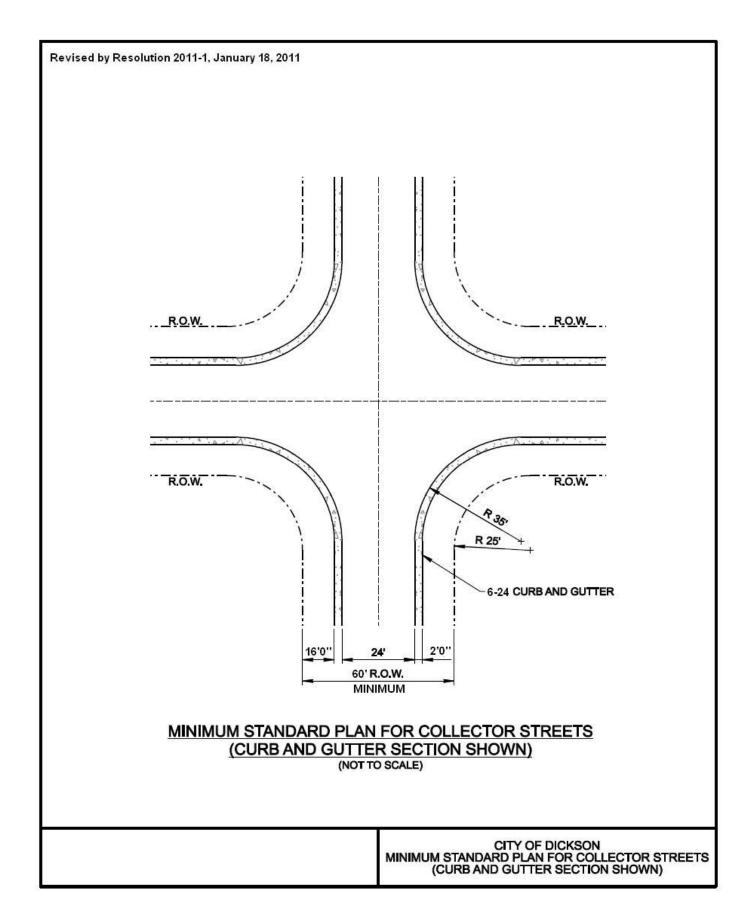












MATERIALS SPECIFICATION & CONSTRUCTION PROCEDURES

The Tennessee Department of Transportation <u>Standard Specifications for Road and Bridge Construction</u> (current edition), American Association of State Highway Transportation Officials <u>A Policy on Geometric Design of Highways and Streets</u> (current edition), the <u>Manual on Uniform Traffic Control Devices</u> (current edition), and Tennessee Department of Transportation Standard Roadway Drawings and Standard Structure Drawings are hereby incorporated by reference.

A. PRELIMINARY WORK

1. Location and Protection of Underground Utilities

- a. Prior to beginning excavation or grading, the developer shall determine, insofar as possible, is required to call Tennessee One Call at 1-800-351-1111 at least 72 hours prior to beginning construction so the actual locations of all underground utilities in the vicinity of his operations and shall clearly mark them so that they can be avoided by equipment operators. Where such utility lines or services appear to lie in the path of construction; they shall be uncovered in advance to determine their exact location and depth and to avoid damage due to excavation or grading operations. Existing facilities shall be protected during construction or removed and replaced in equal condition as necessary.
- b. Should any existing utility lines or service be damaged during or as a result of a sub-divider's operations, the developer shall take such emergency measures as may be necessary to minimize damage and shall immediately notify the utility agency involved. The developer shall then repair the damage to satisfaction of the utility agency or shall pay the utility agency for making the repairs. In all cases the damaged structure shall be in as good or better condition as before the damage occurred.

2. Surveying and Staking

The developer shall be responsible for his own surveys and establish his own alignment and grades as shown on the approved road plans.

3. Removal of Obstructions

The developer shall be responsible for the removal, safeguarding, and replacement of fences, walls, structures, culverts, street signs, billboards, shrubs, mailboxes, or other obstructions which must be moved to facilitate construction. Such obstructions shall be restored to at least their original condition in a location that will not encroach upon the clear zone, impede sight distances, or adversely affect the safe operation of the roadway.

4. Clearing and Grubbing

The developer shall be responsible for cutting, removing, and disposing of all trees, brush, stumps, roots, and weeds within the construction area. Disposal shall be by means of chippers, landfills, or other approved methods not in conflict with state or local ordinances. Care shall be taken to avoid unnecessary cutting or damage to trees not in the construction area. The developer shall be responsible for loss or damage to trees outside the permanent easement or right-of-way. Under no circumstances shall organic materials be buried within the limits of roadway embankments or beneath paved surfaces in cut sections.

5. Traffic Control and Safety

The developer shall provide and maintain access to and from all properties along the line of his work. All traffic control measures shall comply with the current edition of the Manual on Uniform Traffic Control Devices. The developer shall provide, erect, and maintain adequate barricades, warning signs, and lights at all excavations, closures, detours, points of danger, and uncompleted pavement. Where single-line bypasses are provided, the developer shall furnish signal men to control traffic operations and minimize delays. All road closures or disruptions to traffic shall be coordinated with the City Public Works Department, E911 Dispatch and the Dickson County Schools Transportation Director at least one week before the work begins.

6. Erosion and Sediment Control

All disturbances for clearing and grubbing for roadway construction shall meet or exceed the requirements set forth by the required storm water ordinances within the sub-division regulations and state and federal regulations. These measures shall be in place before any roadway construction is begun and shall remain in place throughout the life of the project. Any and all aspects of erosion and sediment control shall at all times be met. All disturbed areas shall be permanently stabilized prior to project acceptance.

7. Roadway Construction Plans

Roadway construction plans shall meet and/or exceed the requirements set forth for all roadway work, and all such plans shall be prepared by an engineer licensed to practice in the State of Tennessee. These plans shall be reviewed and approved by Codes / Public Works prior to the beginning of construction.

B. ROADWAY CONSTRUCTION

1. Stripping, Stockpiling, and Placing Topsoil

a. All topsoil shall be stripped within the street right-of-way and from any other area designated. Topsoil shall be stored in stockpiles. All organic matter within the right-of-way shall be stripped and disposed of as indicated on the approved road

- plans. A four (4) inch minimum depth of topsoil shall be placed where seeding is required or where required by the approved road plans.
- b. After the stockpiled topsoil has been placed as specified above, the area stockpiled shall be neatly graded and dressed, with erosion control measures implemented as required.

2. Excavation

- a. Excavation shall conform to limits indicated on the approved road plans. Excavation materials shall be removed in such a manner that the slopes can be neatly trimmed. Excavation shall be made into the hard pan grade, except where rock or stone masonry is encountered or undercutting of unstable materials is required. Materials removed below grade shall be replaced with approved materials thoroughly compacted. Where borrow materials are required to complete embankments or fills, the developer shall be responsible for providing them.
- b. Rock excavation shall be removed to a minimum depth of twelve (12) inches below the sub-grade and back filled with approved materials which shall be thoroughly compacted by sheep-foot roller and / or eight (8) ton vibratory roller. A roll compaction test will be required on completion, to be overseen by the Public Works Director or his designee.
- c. Where a spring or seepage water is encountered that is not provided for on drainage plans, it shall be reported to the engineering firm responsible for the plans and the City of Dickson Planning, Zoning, and Codes and Public Works Departments. Construction shall cease in the vicinity of the spring or seep until the construction plans have been revised to accommodate the feature, and said plans have received approval from the City of Dickson.

3. Fills and Embankments

- a. Embankment and fill materials shall be free from frost, stumps, trees, roots, sod, or muck. Only materials from excavation or borrow pits, or other approved materials shall be used. Materials shall not be placed on frozen ground.
- b. Where excavated materials are used in fill construction and the materials consist of earth and various grades of rock, the fills shall be carefully constructed with the larger or hard rock on the bottom followed by the smaller or soft rock and finally the earth fill to provide a well-compacted and void-free embankment.
- c. All depressions or holes below the natural ground surface, whether caused by grubbing, rock removal, undercutting, or otherwise, shall be filled with suitable materials and compacted to ground surface before fill construction is started, and inspected for correct compaction.
- d. Backfilling around a structure shall have been completed and thoroughly compacted to ground surface before any embankment materials are placed thereon. Culverts, box culverts, and like structures shall be filled to subgrade with crushed stone in areas of shallow fill and to a height of at least three (3) feet over the structure in deeper fills.

- e. Embankments shall be so constructed that adequate surface drainage will be provided at all times.
- f. Fill area shall be compacted by a sheep's foot roller, to a density of not less than ninety-five (95) percent optimum density and within three (3) percent of optimum moisture content per ASTM D 698 and each lift of fill materials shall be rolled until the roller "walk out". Compaction tests shall be conducted by an independent soil testing consultant for each lift. As an alternative to soil compaction tests by the consultant, the Public Works Director may authorize the testing of each lift by proof roll testing that must be observed by a representative of the City of Dickson or an independent consultant. The soil testing consultant shall not be the design engineer or an employee of the design engineer or subsidiary, but shall be an independent third party.
- g. The finished grade shall be test rolled with a truck and inspected by the Public Works Director or his designee. Any areas found to be soft or "pumping" shall be cut out and replaced with suitable materials in lifts, each lift shall be compacted until the excavation has been brought back to finish grade.
- h. Where excavated materials consist mainly of rock too large to be placed in the normal eight (8) inch thickness without crushing further breaking down pieces, such materials shall be placed in the fill in layers not exceeding three (3) feet in depth. No rock larger than eighteen (18) inches in dimension shall be placed in fill. Care shall be taken to fill all voids between large rocks and to assure that fill materials are compacted such that settling is minimized. Fill materials shall be placed in eight (8) inch lifts requiring a 24" cap layer of materials that can be compacted in the maximum lift thickness. Compaction of the top six (6) inches of cuts or fills shall be accomplished with pneumatic-tire rollers, and / or other necessary or required compaction equipment.
- i. Backfill around structures shall be of crushed stone or earth meeting the approval of the Public Works Director or his designee and the fill shall be placed and compacted in eight (8) inch lifts and brought up evenly on all sides of the structure.

4. Undercutting

- a. This work shall consist of the removal and disposal of unsatisfactory materials below grade in cut sections or areas upon which embankments are to be placed. It shall also include undercutting for pipes and box culverts where required. Known areas to be undercut shall be designated on the approved road plans, and notes shall indicate the depth of expected undercut and methods/source of backfill. On-site undercuts shall be approved by the project engineer, with verification of tests by the Public Works Department. The backfill material shall be placed in eight (8) inch lifts and compacted as specified for fill construction.
- b. Disposal of unsatisfactory materials shall be approved on an as needed basis outside of limits of fill or pavement and shoulders.

5. Sub-Grade Construction and Preparation

- a. The sub-grade shall be prepared in reasonably close conformity with the lines and grades as shown on the approved road plans.
- b. Prior to placing embankment fill or other materials, the topsoil shall be stripped and the soil proof rolled. Any areas found to be "soft" shall be undercut, replaced with compacted fill and proof rolled. If a soil testing consultant is not used for verification of the test, a representative of the City of Dickson must be on site to observe and approve the test.
- c. Grading of sub-grade shall be performed in such manner as to provide ready drainage of water. Ditches and drains shall be maintained to provide proper drainage during construction.
- d. Hauling over finished sub-grade shall be limited to that which is essential for construction purposes and all ruts or rough places that develop in a completed sub-grade shall be smoothed (clipped) and re-compacted. Soft areas shall be removed and replaced with crushed stone, followed by a proof roll compaction test. Pumping areas will be removed, replaced, and re-compacted as required during inspection by the Public Works Director or his designee. Sub-grade density tests shall be conducted by a soil testing consultant licensed by the State of Tennessee, and shall be furnished at the expense of the developer and submitted directly to the Public Works Department, from the testing consultant. The soil testing consultant shall not be the design engineer or an employee of the design engineer, but must be an independent third party. A minimum of one sub-grade density test for every five-hundred (500) feet of roadway will be required per embankment lift or length of cut. As an alternative to these tests, the Public Works Director may approve the use of proof roll testing of each lift, which must be observed by a representative of the City of Dickson or an independent soil testing consultant.
- e. The final sub-grade shall be inspected by a roll compaction test by the Public Works Director or his designee prior to placing aggregate base material. The developer shall provide a fully loaded test vehicle (standard dump truck) at his own expense.

6. Shoulders and Slopes

All shoulders and slopes shall be trimmed and shaped to conform with the cross sections shown on the plans and as specified in the Standard Roadway Sections of the City of Dickson. Rock cuts shall be sealed of loose fragments, projecting points, etc., so as to leave a clean and neat appearance. Shoulders shall be completed where required as shown on the approved road plans and shall be double bituminous surface treated, with care being taken to protect the surface and edges of pavement. Shoulder materials shall be placed in uniform layers and compacted by overlapped rolling of both base course and pavement. The finished shoulder shall be firm against the pavement.

7. Guardrail

The developer shall plan and install guardrail in areas of hazard along roadways for the protection of the public. Such areas include roadway embankments with steep foreslopes, bridges, box culverts, overcrossing structures, and roadway embankments over thirty (30) feet in height from the riding surface to the toe of embankment slope. Steep foreslopes are defined as slopes greater than 3:1. Guardrail shall be place at locations/conditions normally indicated by TDOT or nationally accepted standards. The City of Dickson reserves the right to specify additional locations in the interest of public safety.

C. BASE AND PAVING

1. Base Stone

- a. The base course of stone shall be placed and compacted in layers or lifts upon the prepared sub-grade to a finish thickness as described and shown on the plans. No single layer or lift shall exceed four (4) inches in depth.
- b. The base course shall be a pug mill mix of mineral aggregate, conforming to the required depth as stipulated in Appendix B. The aggregate base shall not be spread on a sub-grade that is frozen or that contains frost. The base stone shall be placed and spread in uniform layers or lifts without segregation of size; each layer shall be compacted to a thickness no greater than four (4) inches. The stone shall be mixed with graders or other equipment until a uniform mixture is obtained. Each layer shall be compacted by rolling with alternate blading until smooth, even, and uniformly compacted finish is obtained.
- c. The base stone shall be graded and rolled while it is still moist from the pug mill mix. If the mix is too dry, water shall be added with a distributor tank truck while the stone is being graded and rolled. Compaction shall be uniform for the entire width of the roadway until density of ninety-eight (98) percent of the solid volume has been achieved. Placement and compaction of each layer shall be approved by the Public Works Director or his designee before materials for the next successive layer are placed.
- d. Base stone density tests shall be conducted by a testing laboratory licensed by the State of Tennessee, and shall be furnished at the expense of the developer and submitted directly to the Public Works Department, from the testing laboratory. A minimum of one base stone density test for every five-hundred (500) feet of roadway will be required. Proof roll testing, as discussed above, may be authorized by the Public Works Director.
- e. No pavement shall be placed until the stone base has been proof roll tested by developer and the Public Works Director or his designee. The developer shall provide a fully loaded test vehicle at no expense to the City.

2. Prime Coat

a. After the base stone has been prepared as outlined above, a bituminous prime coat shall be applied uniformly over the surface of the base by the use of an

approved bituminous distributor. The prime coat shall be applied at the rate of the three-tenths (3/10) gallon per square yard, using RC-250, or refined tar Grade RT-2, RT-3, or emulsified asphalt, Grade AE-P. If, after the bituminous materials have been applied, they fail to penetrate before the time that the roadway is being used by traffic, dry cover materials shall be spread at a rate (between eight (8) and twelve (12) pounds per yard) to prevent damaged to the primed surface. An excess of cover materials shall be avoided. No succeeding state of construction shall be placed upon the prime coat until it has properly cured. Aggregate for cover materials shall be Size No. 78 or 8.

b. In addition to these general requirements, unless otherwise stipulated, all materials and methods of installation shall conform to the technical specifications.

3. Binder Course

In residential streets, the binder course shall be installed prior to the sale of any lot or improvements. A binder course of asphalt shall be applied upon completion of the prime coat. The binder mix shall be asphalt concrete "B" modified in the thickness shown on the detail sheet for that class street.

4. Tack Coat

A tack coat shall be applied to old or existing pavement surface or to a previously prepared base or surface to provide bond for an overlaid course. The tack coat shall be applied at the rate of one-tenth (1/10) gallon per square yard using materials and methods of installation.

5. Wearing Surface

Prior to the application of the wearing surface the developer shall contact the Department of Public Works and apply the tack coat. In residential applications, this shall be done when the developed area is within 75% of completion or two years from the start of construction. The developer will at that time construct the wearing surface as per the Standard Roadway Sections of the City of Dickson. The wearing surface shall be the thickness shown on the detail sheet for that class street. All materials and methods of installation shall conform for asphaltic concrete surface. The wearing surface shall be constructed of CW, D, or E mix and shall utilize asphaltic cement Grade RT- 4 or 5, or TRCB- 5, or 6, in accordance with the Standard Roadway Sections of the City of Dickson. The completion of the wearing surface shall be contingent on the 75% status of the subdivision or by the authority for completion set forth by the City Council of the City of Dickson.

6. Shoulders

a. Shoulder construction shall be completed by blading, moistening as necessary, and by thoroughly compacting. The shoulders shall be the width and thickness shown on the typical section as required herein and covered with the typical section as required herein and covered with a double bituminous surface

treatment. The surface shall be prepared as directed in advance of the surface construction. Upon completion of the prime coat, a double bituminous surface treatment shall be applied with the first course being at a rate of between 0.38 and 0.42 gallons per square yard. If the width of application is wider than the distributor, each width of spread shall not be less than one-half (1/2) the surface to be treated. Areas inaccessible to the distributor shall be treated either with hand sprays or pouring pots. Immediately after each application of bituminous materials has been made, it shall be covered uniformly with Size No. 6, mineral aggregate. The aggregate shall be spread at a rate of between thirty (30) and forty (40) pounds per square yard. The first application shall be allowed to cure for a length of time to be determined by the enforcing officer before the second application is begun.

- b. The second application of bituminous materials shall be applied in the same manner as the first application, at a uniform rate between 0.30 and 0.35 gallons per square yard. Mineral aggregate, Size No. 7, shall then be spread in the same manner as for the first spread at a rate between twenty (20) and twenty-five (25) pounds per square yard.
- c. Immediately after each spread of cover aggregate, uniform coverage shall be achieved by hand brooming. Additional aggregate shall be placed by hand on thin bare areas.
- d. Immediately after spreading and brooming the cover aggregate, the entire surface shall be rolled, beginning at the edges and progressing to the edge of the pavement. Rolling shall begin within thirty (30) minutes after the aggregate has been spread. The same rolling and curing procedures required in making the first application shall be repeated in making the second application.
- e. In addition to these general requirements, unless otherwise stipulated, all materials and methods of installation shall conform to the technical specifications set forth per the text and in accordance with Appendix B of the sub-division regulations for the Standard Roadway Sections of the City of Dickson.

7. Testing

The developer will provide proper testing and inspection of asphalt material at the plant and at the project site at his expense. Certification that the asphalt meets regulations will be supplied to the Public Works Department at the time of placement. Final inspection shall be requested two weeks in advance and this inspection performed by the Public Works Director or his designee.

D. DRAINAGE SYSTEM

1. Ditching and Channelization

This work shall consist of the construction of ditches adjacent to roadway shoulders and feeding to and from culverts under or adjacent to the roadway. All drainage ditches shall be graded in their entirety during the time the roadways are being graded; such grading shall be completed prior to final inspection of the roadways. Drainage system design shall be performed by a licensed engineer and submitted

on behalf of the developer to the City of Dickson. Drainage systems shall be designed to convey the 25-year storm in storm sewers, the 50-year storm in open ditches, and to accommodate the 100-year storm in all portions without damage to structures or hazard to the public. Streams or waterways shall have culverts designed to meet FEMA regulations with respect to effect on water surface elevations.

2. Stabilization of Channelization

a. All open ditches shall be stabilized in accordance with the following requirements:

Size of Neares	st		<u></u>
Culvert (Upstream	Seeding Required	Sod Required	To be Concrete Lined
15"	Grades 1.00% - 3.00%	Grades 3.00% - 12.00%	Grades Exceeding 12.00%
18" thru 24"	Grades 1.00% -1.50%	Grades 1.50% - 7.00%	Grades Exceeding 7.00%
30" thru 36"	Grades 1.00%-1.50%	Grades 1.50%- 4.00%	Grades Exceeding 4.00%
42" thru 72"	Grades Not Allowed	Grades 2.50% or less	Grades Exceeding 2.50%

b. Alternate methods of stabilization, such as turf reinforcement grids, will be considered upon submission of detailed design calculations for the intended application. Consideration shall not be construed as acceptance. City staff shall make such determinations in the best interest of the City of Dickson and the general public.

3. Concrete Ditch Paving

- a. Concrete ditch paving shall consist of the construction of paved ditches on a prepared sub-grade. The sub-grade shall be shaped and compacted to a firm even surface.
- b. All soft materials shall be removed and replaced with acceptable materials and compacted.
- c. Concrete ditch pavement shall be four (4) inches in thickness throughout and shall be back filled immediately after the concrete has set and the forms have been removed. The back filled materials shall be thoroughly compacted. Expansion joints shall be located every four (4) feet or as per TDOT standard drawings.

4. Culvert and Storm Drains

a. General

- i. This work shall consist of the construction of pipe culverts and storm sewers as shown on the plans.
- ii. Driveway culverts and cross drains shall be sized by the engineer in subdivisions and developments involving more than one driveway or for a driveway culvert in a commercial development, with calculations to be submitted to the Planning, Zoning, and Codes Department. All cross drains shall be Class III RCP (minimum) unless a waiver is granted by the Planning Commission or unless otherwise herein specified. Unless hydraulic calculations dictate a larger size, cross drains shall be a minimum of eighteen (18) inches. Corrugated metal pipe may be used for residential driveway culverts.
- iii. Reinforced concrete pipes shall conform to minimum standards for Class III, Reinforced Pipes, A.S.T.M. C76. Corrugated metal pipes shall conform to size stipulated below, and to gage as follows:

Size	Rounded Corrugated Metal Pipes	Gage	
15" — 24" 30"		16	14
36" — 48" 54" — 72" 78" — 84"		12 10 8	

Size Gage 18" X 11"— 22" X 13" 16 25" X 16"— 36" X 22" 43" X 27"— 65" X 40" 72" X 44" or Larger 10 Gage

iv. For pipes smaller than forty-eight (48) inches in diameter, a minimum cover of one (1) foot, exclusive of base and paving, is required from top of pipes to finished sub-grade. A minimum cover of two (2) feet is required for pipes forty-eight (48) inches in diameter and larger. All pipes shall be built on straight line and grade shall be laid with the spigot end pointing in the direction of the flow,

- with the ends fitted and matched to provide tight joints and smooth uniform invert.
- v. Pipes shall be bedded on a six (6) inch thickness of Class B materials and back filled to a depth of fifty (50) percent of the diameter of the pipes with crushed stone. Recesses shall be dug in the bedding materials to accommodate the bell. Class B bedding shall be Size No. 7. Culverts and storm drains in existing roadways shall be back filled to sub-grade with crusted stone.

b. HDPE Pipe

i. Corrugated plastic pipe used in the City of Dickson public storm sewer system shall meet the applications and standards of manufacture and construction herein specified as a minimum.

ii. Applications

- a. HDPE pipe may be used under minor streets in residential subdivisions where the ADT is not expected to exceed 1000. HDPE pipe shall not be used under collectors or arterials, or under streets connecting two collectors or arterials, which might be used as a connection between the two higher classified streets. The City of Dickson shall have discretion over the classification of streets and potential for use as a connection between higher classified streets.
- b. Additionally, HDPE pipe may be used as side drain piping (pipes under private driveways, business and field entrances). All pipe used as side drains adjacent to collector or arterial streets shall have headwalls appropriate to the type of street adjacent to the driveway or entrance (typically TDOT safety headwalls).
- c. HDPE pipe shall be installed in trenches not exceeding 10-feet of cover over the crown of pipe.
- d. Maximum allowable diameter of HDPE pipe is 48-inches.
- e. HDPE pipe may be used to convey storm water from one side of the rightof-way to the other under streets where its use is permitted and the drainage area is 40 acres or less, but shall not be used as cross drain piping to convey streams from the one side of the right-of-way to the other. Streams shall generally be defined as those appearing as a blue line on a USGS quadrangle map, or as designated by the Tennessee Department of Environment and Conservation, the U.S. Army Corps of Engineers, the Tennessee Valley Authority, or other regulatory agency.
- f. Non-concrete catch basins or headwalls shall not be used in the public storm sewer system.

iii. Materials

a. Corrugated plastic pipe shall be made of high density polyethylene (HDPE) and fully comply with AASHTO standard M294 Type S, current edition. It shall have a smooth interior waterway with exterior corrugations. Recycled

resin shall not be allowed. All acceptable pipe manufacturers and diameters are listed by the National Transportation Product Evaluation Program (NTPEP). Furthermore, all HDPE pipe delivered and used shall bear the third party certification seal of approval by the Plastic Pipe Institute (PPI).

- b. All Rubber gaskets for HDPE pipe shall conform to ASTM F477, "Specification for Elastomeric Seals (Gaskets) for Joining Plastic Pipe." HDPE pipe joined by bell and spigot shall be joined using gaskets that conform to ASTM F477. Joints shall meet the specification for watertightness.
- c. All catch basins and pipe endwalls installed in public rights-of-way or drainage easements, or connected to the public storm sewer system shall be concrete.

iv. Construction

- a. HDPE pipe shall be assembled in the field in accordance with the manufacturer's specifications. The pipe shall be installed beginning at the outlet and progressing toward the inlet end.
- b. The design engineer shall verify the stiffness of soils in the vertical walls of the trench. If the soils are not stable and firm HDPE pipe shall not be installed or used. Certification of this verification shall be provided in writing to the City of Dickson.
- c. HDPE pipe shall not be installed if water is present in the trench or in a location where a high water table is encountered. Additionally, HDPE pipe shall not be used if the inlet or outlet of the pipe will be submerged due to ponding.
- d. HDPE pipe shall be aligned such that the pipe sections form a continuous vertical grade line without irregularities in the flow line. Sections that cause a change in vertical grade line or horizontal alignment shall be removed and re-graded.
- e. HDPE pipe shall be installed on a minimum of 6-inches of class B bedding. The bedding shall be compacted to a minimum of 90% standard Proctor density unless otherwise specified.
- f. Structural backfill shall be placed in layers not exceeding 6-inches of loose thickness. Structural backfill shall be placed on both sides of the pipe at the same time and shall be brought to no less than 1-foot above pipe crown. In areas crossing under traffic lanes in pavement, structural backfill shall be extended to the subgrade elevation.
- g. Structural backfill shall be worked into the haunch and compacted by hand. Minimum compaction shall be 90% standard Proctor density per AASHTO T99 and shall be accomplished by vibratory plate device. Hydrohammers shall not be used over HDPE pipe.
- h. HDPE pipe shall have a minimum of 2-feet cover over the crown of pipe to allow traffic to pass over the pipe. The pipe shall have a minimum cover in all applications of 1-foot exclusive of base stone and paving, and shall have a minimum cover of 2-feet in areas outside of paving.

- i. HDPE pipe deflection shall be measured after installation. Pipe with deflections exceeding 5% of the inside pipe diameter shall be removed and replaced. Pipe that has been damaged shall not be installed and shall be removed from the project site.
- j. All changes in pipe direction or pipe slope shall be accomplished at a catch basin or manhole. Provision shall be made to allow access for maintenance. Fittings such as elbows and tees shall not be allowed.

v. Inspection and Acceptance

a. All pipes shall be inspected during installation prior to covering. The City of Dickson shall have the option of attending inspections. The City of Dickson Public Works Department shall be notified at least one week prior to installation of HDPE piping to allow coordination of inspections. Documentation of the inspection and certification of correct installation shall be provided to the City of Dickson for all installations within public rights-of-way or connecting to public storm sewer systems. The Owner shall provide certification by either the design engineer or manufacturer's representative that maximum pipe deflections do not exceed 5% of the inside diameter of the pipe. Pipe with deflections exceeding this requirement shall be removed and replaced.

5. Headwalls

Concrete headwalls shall be constructed at both ends of cross drains as shown and detailed on the standard drawings included in the City of Dickson Subdivision Regulations. Headwalls in State Right-of-Way shall conform to Tennessee Department of Transportation Standards.

6. Catch Basins

- a. The work shall consist of constructing catch basins complete with inlets, outlets, and inverts. Tops and inlets shall be constructed to conform to roadway grade so that drainage can easily be caught and no ponding created. Catch basins shall be constructed as shown and detailed on the standard drawing included herein. Calculations indicating catch basin hydrology, gutter spread and pipe hydraulics shall be submitted to the Planning, Zoning, & Codes Department. Gutter spread shall be limited to six (6) feet on local residential streets and six (6) feet on collector, arterial, and industrial streets. Catch basins and grates shall be installed at the appropriate roadway width and grade.
- b. Catch basins and grates that are incorrectly installed such that pavement widths or grades do not meet minimum standards shall be removed and re-set correctly. Holes left by the relocation shall be backfilled with crushed stone in accordance with Section IV.B. Roadway Construction.

7. Box Culverts and Bridges

Design of box culverts and bridges shall be included in the approved drainage plans before construction is permitted.

8. Roadside Ditches

Roadside ditches, in conventional sections, shall be built to a grade that will permit good drainage, and in no case shall the slope of the ditch be less than one (1) percent (a fall of 1.00 foot in 100 feet). All drainage ditches shall be stabilized, as indicated in these specifications.

9. Changes in Water Channels

Where the developer rechannelizes a waterway or drainage path through a subdivision, he shall be responsible for replacing cross drains under streets as directed by the Public Works Director or his designee. The work shall be done at the expense of the developer. State of Tennessee and Federal permits shall be obtained prior to construction and copies of said permits shall be provided to the Planning, Zoning and Codes and Public Works Departments. Crossings shall be designed to City standards by a licensed engineer at the developer's expense.

10. Curb and Gutter (Formed)

- a. Concrete curbs and gutters shall conform to the standard drawings as detailed herein. Concrete for curbs and gutters shall be Class A, 3,000 psi.
- b. Curbs and gutters shall be constructed to the lines and grades shown on the approved plans. The final sub-grade for curbs and gutters shall be carefully graded and compacted to an even density and shall be smooth and true to grade. Curbs and gutters shall be constructed with materials and methods which conform to the technical specifications.
- c. Concrete driveway ramps shall be required on all curb and gutter streets. The ramps shall extend a minimum of five (5) feet behind the curb. Materials for the remaining portion of the driveway shall be determined by the developer. Driveway ramp construction shall conform to detailed standard drawing included herein as a minimum.
- d. Any driveway ramp to be placed after initial laying of curb shall require a curb cut permit and shall be installed in accordance with the standard drawings included herein as a minimum.

E. FINAL DRESSING, SEEDING, AND SODDING

1. Final Dressing

a. This work shall consist of dressing all slopes and areas to within reasonable close conformity to the lines and grades indicated on the plans, or as directed by the enforcing officer. Final dressing shall be performed by hand or machine to

- produce a uniform finish to all parts of the roadway including embankments, ditches, etc. Rock cuts shall be cleaned of all loose fragments; side slopes shall be laid back to a three to one (3:1) slope and seeded as described in these specifications.
- b. The entire right-of-way shall be cleaned of all weeds and brush, and all structures, both old and new, shall be cleared of all brush, rubbish, sediment, or other objectionable materials. Catch basins shall be cleaned of sediment and grates shall be cleaned of debris.

2. Seeding

- a. In all areas damaged or disturbed by the construction operation where established ground cover was present before beginning of construction, the developer shall be responsible for restoring the ground cover after completion of construction, unless noted otherwise on the drawings and approved by the City. All areas seeded shall be graded smooth prior to seeding and the developer shall be responsible for maintenance of the smooth finished grade until grass is established.
- b. After designated areas have been carefully hand graded, soil shall be prepared for fertilizing and seeding. Fertilizer shall be a standard commercial fertilizer Grade 15-15-15 or equivalent, and shall be applied at a rate not less than ten (10) pounds per one thousand (1,000) square feet. The fertilizer shall be lightly harrowed, raked, or otherwise incorporated into the soil for a depth of approximately one half (1/2) inch. The developer shall be responsible for any regrading or reseeding required to produce an acceptable grass cover. Rutting and washing shall be restored by reseeding and strawing; in areas of extreme erosion, sodding may be required.
- c. The seed shall be as follows:

	GROUP "A"	
Seed	Quantity % by Weight	Seeding Dates
Kentucky 31 Fescue	80%	February 1 - July 1
English Rye	5%	
Korean Lespedeza	15%	
	GROUP "B"	
Kentucky 31 Fescue	55%	June 1 - August 15
English Rye	20%	_
Korean Lespedeza	15%	
German Millet	10%	
	GROUP "C"	
Kentucky 31 Fescue	70%	August 1 - December 1
English Rye	20%	-
White Clover	10%	

The seed shall be sown uniformly at the rate of one and one-half (1½) pounds per one thousand (1,000) square feet. Following the application of seed, all seeded areas shall be covered by a layer of straw mulch.

3. Sodding

- a. Sodding shall consist of furnishing and placing sod at all locations shown on the approved plans and inspected by the Codes and Public Works Departments. Work shall include the furnishing and placing of new sod, consisting of live, dense, well-rooted growth of permanent grasses free from Johnson grass and other obnoxious grasses or weeds, well suited for the soil on which it is placed. All sod shall be cleanly cut in strips having a uniform thickness of not less than two and one-half (2½) inches. Sod shall be set when the soil is moist and favorable to growth. No setting shall be done between October 1 and April 1. The area to be sodded shall be brought to the lines and grades shown on the approved plans.
- b. Sod shall be placed within 7 days of removal from the point of origin; it shall be kept in a moist condition during the interim. Sod shall be carefully placed by hand on the prepared ground surface with the edges in close contact and, as far as possible, in a position to break joints. Each strip of sod laid shall be fitted into place and tamped. Immediately after placing, the sod shall be thoroughly wetted and rolled with an approved roller. On slopes of two to one (2:1) or steeper, pinning or pegging shall be required to hold the sod in place. Sod remaining on pallets longer than 7 days from the point of origin shall be removed from the site.
- c. The surface of the ground to be sodded shall be loosened to a depth of not less than one (1) inch with a rake or other device. If necessary, it shall be sprinkled until saturated for a minimum depth of one (1) inch and kept moist until the sod is placed. Immediately before placing the sod, fertilizer and lime shall be applied uniformly to the prepared surface of the ground. Fertilizer shall be applied at the rate of eight (8) pounds of Grade 15-15-15, or equivalent, per one thousand (1,000) square feet.
- d. The sod shall be watered for a period of two (2) weeks. The developer shall not permit any equipment or materials to be placed on any planted area and shall erect suitable barricades and guards to prevent equipment, labor, or the public from traveling on or over any area planted with sod.

F. SIDEWALKS

- 1. All sidewalk construction or replacement shall follow the Americans With Disabilities Act and be five (5) feet wide, a minimum of four (4) inches thick, and made of 3,500 psi concrete with either residential fiber or 6" x 6" mesh reinforcement wire. All sidewalks shall be placed and finished according to all applicable procedures recommended by the National Ready Mix Concrete Association or the Tennessee Ready Mix Concrete Association.
- Subgrade preparation for sidewalks, driveways, and median pavement shall be made to the required depth and to a width that will permit the installation and bracing of the forms. The subgrade shall be shaped and compacted to a firm,

- even surface in reasonably close conformity with the grade and cross section shown on the Plans. All soft and yielding material shall be removed and replaced with acceptable material, which shall then be compacted as directed. Crushed stone shall be placed to a minimum depth of 4-inches under all sidewalks, but may be deeper if conditions warrant.
- 3. Unless otherwise indicated on the Plans or directed by the Engineer, premolded expansion joint filler, 1 inch (25 mm) in thickness, shall be placed at the locations and in line with expansion joints in the adjoining pavement, gutter or curb. All premolded expansion joint filler shall be cut to full width or length of the proposed construction and shall extend to within 1 inch (25 mm) of the top or finished surface. All longitudinal expansion joints shall be placed as indicated on the Plans or as directed by the Engineer. All expansion joints shall be true, even, and present a satisfactory appearance.
- 4. Construction joints shall be formed around all appurtenances, such as manholes, utility poles, etc., extending into and through the sidewalk or median area. Premolded expansion joint filler, 1 inch (25 mm) thick, shall be installed in these joints. Expansion joint filler of the thickness indicated shall be installed between concrete sidewalks and any fixed structure, such as a building or bridge. One inch (25 mm) thick expansion joint filler shall be installed between concrete curb and median pavement and, unless otherwise specified, between concrete curb and sidewalk. This expansion joint material shall extend for the full depth of the walk or median pavement.
- 5. The concrete shall be struck-off with a transverse template resting upon the side forms. After the concrete has been struck-off to the required cross section, it shall be finished with floats and straightedges until the required surface requirements have been obtained.
- 6. When the surface of the concrete is free from water and just before the concrete obtains its initial set, it shall be finished and swept lightly with a broom in order to produce a sandy texture. The longitudinal surface variations shall be not more than 1/4 inch (6 mm) under a twelve (12) foot (3.6 m) straightedge, nor more than 1/8 inch (3 mm) on a five (5) foot (1.5 m) transverse section. The surface of the concrete shall be so finished as to drain completely at all times.
- 7. The edges of the sidewalks, driveways and median pavement shall be carefully finished and rounded with an edging tool having a radius 1/2 inch (13 mm).
- 8. The surface of sidewalks shall be divided into blocks by use of a grooving tool. The grooves shall be spaced approximately five (5) feet (3 m) apart and the blocks shall be rectangular unless otherwise ordered by the Engineer. The grooves shall be cut to a depth of not less than one (1) inch. The edges of the grooves shall be edged with an edging tool having a radius of 1/4 inch (6 mm). Grooves shall be placed in median pavement in line with corresponding joints in adjoining construction or as directed by the Engineer.
- 9. Unless otherwise indicated on the Plans, marks or grooves shall be placed at right angles to the center-line of driveways and approximately eight (8) inches (200 mm) apart. These markings shall be between 1/8 and 1/4 inch (3 to 6 mm) in depth and shall be made with a suitable marking tool. A grooving tool, six (6) to eight (8) inches (150 to 200 mm) in width, with multiple grooves for grooving alternate strips eight (8) inches (200 mm) apart, may be used. Any irregularities

- caused by the edges of the marking tool shall be removed by the use of a wetted brush or wooden float. All marking edges shall be rounded satisfactorily.
- 10. Grooves shall not be placed in the surface of sidewalks or driveways reinforced for beam action where the full thickness of concrete is required for strength.
- 11. The edges of the concrete at expansion joints shall be rounded with an edging tool having a radius of 1/4 inch (6 mm). All marks caused by edging shall be removed. The top and ends of expansion joint material shall be cleaned of all concrete, and the expansion joint material shall be so trimmed as to be slightly below the surface of the concrete.
- 12. Forms may be removed at any time that removal will not damage the concrete. No pressure shall be exerted upon the concrete in removing forms.
- 13. Pedestrians will not be allowed upon concrete sidewalks, driveways, or medians until twelve (12) hours after finishing concrete, and no vehicles or loads shall be permitted on any sidewalk, driveway, or median until the Engineer has determined that the concrete has attained sufficient strength for such loads. The developer shall provide concrete cylinder breaks at 14 and 28 days to illustrate concrete strength. Cylinder breaks shall be performed at least once for each day's pour, and for every 20 cubic yards of concrete placed. Cylinders shall be made from concrete taken directly from the truck. Cylinders shall be made by a qualified technician.
- 14. The Contractor shall construct and place such barricades and protection devices as are necessary to keep pedestrians and other traffic off the sidewalk, driveway, or median.
- 15. Any sidewalk, driveway, or paved median damaged prior to final acceptance of the project shall be repaired, at the Contractor's expense, by removing concrete within groove limits and replacing it with concrete of the type and finish in the original construction.
- 16. Immediately after removing the side forms, the spaces along the edges of sidewalk or driveway shall be filled with suitable material. This material shall be placed in layers not exceeding four (4) inches (100 mm) in loose thickness, and compacted until firm and stable.

APPENDIX C FIRE HYDRANT CLASSIFICATION AND COLOR CODE SCHEME

GENERAL INSTRUCTIONS

To insure that a uniform color code scheme is used throughout the county when installing fire hydrants, the following classification and color code shall be used.

A. <u>CLASSIFICATION OF HYDRANTS</u>

Fire hydrants shall be painted in a uniform color coding scheme in order to designate the rated flow capacity of the hydrant. The regulations of the National Fire Protection Association (NFPA), Section 291, Recommended Practice For Fire Flow Testing And Making Of Hydrants, 1988 Edition shall be used.

Hydrants shall be classified in accordance with their rated capacities (at 20 psi (1.4 bar) residual pressure or other designated value) as follows:

Class AA Rated capacity of 1500 gpm or greater (5680 L/min)

Class A Rated capacity of 1000-1499 gpm (3785-5675 L/min)

Class B Rated capacity of 500-999 gpm (1900-3780 L/min)

Class C Rated capacity of less than 500 gpm (1900 L/min)

B. MARKING OF HYDRANTS

All barrels should be crome yellow unless otherwise designated by the local utility district. The tops and nozzle caps shall be painted with the following capacity-indicating color scheme:

Class AA Light blue

Class A Green

Class B Orange

Class C Red

For rapid identification at night, the capacity colors shall be of a reflective-type paint.

Hydrants rated at less than 20 psi (1.4 bar) shall have the rated pressure stenciled in black on the hydrant top.

SUBDIVISION REGULATIONS

Franklin, Tennessee



HISTORIC FRANKLIN TENNESSEE

Adopted April 15, 1966
Last Amended February 28, 2013

TABLE OF CONTENTS

<u>CHAPTER</u>				PAGE
1.	GEN	ERAL PR	COVISIONS	
	1.1	Purpose	es	1-1
	1.2	Authori	ity	1-1
	1.3	Jurisdic	etion	1-1
	1.4	Definiti	ions	1-2
		1.4.1	Alley	1-2
		1.4.2	Block	1-2
		1.4.3	Building Line or Setback Line	1-2
		1.4.4	Easement	1-2
		1.4.5	Land Use Plan	1-2
		1.4.6	Lot	1-2
		1.4.7	Lot, Corner	1-3
		1.4.8	Lot, Double-Frontage	1-3
		1.4.9	Lot, Reverse-Frontage	1-3
		1.4.10	Lot of Record	1-3
		1.4.11	Plat, Final	1-3
		1.4.12	Plat, Preliminary	1-3
		1.4.13	Street	1-3
		1.4.14	Street, Arterial	1-3
		1 4 15	Street Collector	1-4

CHAPTER				PAGE
		1.4.16	Street, Cul-de-Sac	1-4
		1.4.17	Street, Frontage or Service	1-4
		1.4.18	Street, Local	1-4
		1.4.19	Subdivider	1-4
		1.4.20	Subdivision	1-4
	1.5	General	Procedure	1-5
		1.5.1	Plat Approval	1-5
		1.5.2	Official Recording	1-5
		1.5.3	Agenda	1-5
2.	DESI	GN		
	2.1	Urban I	Design Principles	2-1
	2.2	Subdivi	sion Design Principles	2-1
		2.2.1	Streets	2-1
		2.2.2	Blocks	2-4
		2.2.3	Lots	2-5
		2.2.4	Alleys	2-6
		2.2.5	Suitability of the Land	2-6
		2.2.6	Public Use and Service Areas	2-8
3.	DEV	ELOPME	NT PREREQUISITE TO FINAL APPROVAL	
	3.1	Require	ements Improvements	3-1

CHAPTER				PAGE
		3.1.1	Monuments	3-1
		3.1.2	Pins	3-1
		3.1.3	Grading	3-1
		3.1.4	Storm Drainage	3-2
		3.1.5	Streets	3-3
		3.1.6	Sidewalks	3-4
		3.1.7	Water Supply System	3-5
		3.1.8	Sanitary Sewerage System	3-6
		3.1.9	Fire Hydrants	3-6
		3.1.10	Street Lighting	3-6
		3.1.11	Street Sign Poles and Street Signs	3-6
		3.1.12	Underground Utilities	3-6
	3.2.	Mainter	nance and Supervision	3-6
	3.3	Improve Bonds	ements, Performance Bonds and Maintenance	3-7
		3.3.1	Completion of Improvements	3-7
		3.3.2	Performance Bond	3-8
		3.3.3	Surety	3-8
		3.3.4	Reduction or Release of Performance Agreement and Surety	3-8
		3.3.5	Failure to Complete Improvements	3-9

CHAPTER				PAGE
		3.3.6	Maintenance Bond	3-9
		3.3.7	Appeal to the Planning Commission	3-10
4.	PLA'	Γ PREPA	RATION AND APPROVAL PROCEDURE	
	4.1	Prelimi	inary Plat	4-1
		4.1.1	General	4-1
		4.1.2	Preliminary Plat Fee	4-1
		4.1.3	Contents of the Preliminary Plat	4-1
		4.1.4	Planning Commission Action	4-5
		4.1.5	Two-Lot Subdivisions	4-5
	4.2	Final P	lat	4-6
		4.2.1	General	4-6
		4.2.2	Time of Submission	4-6
		4.2.3	Contents of the Final Plat	4-6
		4.2.4	Planning Commission Action	4-12
		4.2.5	Recording of Plat	4-12
		4.2.6	Minor Revisions to Final Plats	4-12
	4.3	Variati	ons and Exceptions	4-12
5.	LEG.	AL STAT	TUS	5-1
	5.1	Discrep	pancy With Other Regulations	5-1
	5.2	Validit	y	5-1

CHAPTER			PAGE
	5.3	Repeal	5-1
	5.4	Enforcement	5-1
	5.5	Penalties	5-2
		5.5.1	5-2
		5.5.2	5-2
		5.5.3	5-2
	5.6	Adoption, Effective Date and Amendments	5-2
6.	CERT	ΓΙFICATIONS	6-1
	6.1	Certificate of Ownership	6-1
	6.2	Certificate of Survey	6-1
	6.3	Certificate of Approval of Water and Sewer Systems	6-1
	6.4	Certificate of Approval of Streets and Drainage	6-2
	6.5	Certificate of Approval for Recording	6-2
	6.6	Certificate of Approval of Subdivision Name and Street Names	6-2

1. GENERAL PROVISIONS

1.1 Purposes

Land subdivision is the first step in the process of community development. Once land has been divided 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 streets must be maintained and various public services must be provided. The public health, safety and welfare is thereby affected in many important respects. It is therefore in the interest of the public, the developer and the future owners that subdivisions be conceived, designed and developed in accordance with the ordinances and regulations governing the subdivision of land within the City of Franklin, hereinafter referred to as the City, and the Land Use Plan.

The following standards guiding the Franklin Municipal Planning Commission, hereinafter referred to as the Planning Commission, are designed to provide for the harmonious development of the City; to secure a coordinated layout and adequate provision for traffic; and to secure adequate provision for light, air, recreation, transportation, water, drainage, sewerage and other facilities.

1.2 Authority

These Subdivision Regulations are adopted, and shall be amended, under the authority granted by Sections 13-4-301 through 13-4-309, <u>Tennessee Code Annotated</u>. The Planning Commission has fulfilled the requirements set forth in these acts as prerequisite to the adoption of these regulations.

1.3 Jurisdiction

These Subdivision Regulations shall govern all subdivision of land within the corporate limits of the City. Within these regulations the term "subdivision" shall be defined in subsection 1.4, <u>Definitions</u>, of this Section. Any owner of land wishing to subdivide land shall submit to the Planning Commission a plat of the subdivision according to the design and development standards as stated in Sections 2 and 3, and which shall conform to the minimum requirements for plat preparation and approval procedure as set forth in Section 4 and to the Major Thoroughfare Map filed in the Register's Office of Williamson County, Tennessee on December 28, 1979, and as may be further amended.

1.4 Definitions

Unless otherwise stated, the following words shall, for the purpose of these Subdivision Regulations, have the meanings herein indicated. Words used in the present tense include the future, the singular includes the plural and the plural the singular.

1.4.1 Alley

A minor public way used primarily for access to the back or side of properties otherwise abutting a street.

1.4.2 Block

A parcel of land intended to be used for urban purposes, which is entirely surrounded by public streets, railroad rights-of-way, public walks, parks or green strips, rural land or drainage channels or any combination thereof.

1.4.3 <u>Building Line or Setback Line</u>

A line or lines designating the area within which buildings may be erected.

1.4.4 Easement

A grant by a property owner to the public, a corporation or persons of the use of land for specific purposes.

1.4.5 Land Use Plan

The development plan for the City, which has been officially adopted to provide long-range development policies for the areas subject to urbanization in the foreseeable future, and which includes, among other things, the plan for land uses, land subdivision, vehicular and pedestrian circulation and community facilities.

1.4.6 Lot

A parcel of land occupied or intended to be occupied by one (1) main building, or a group of main buildings, including such open spaces as are required by these and other regulations and ordinances, and having its principal frontage on a street.

1.4.7 Lot, Corner

A lot located at the intersection of and abutting on two (2) or more streets.

1.4.8 Lot, Double-Frontage

A lot which runs through a block from street to street and which has two (2) nonintersecting sides abutting on two (2) or more streets.

1.4.9 <u>Lot, Reverse-Frontage</u>

A double-frontage lot having the rear yard abutting a major street and with the primary means of ingress and egress being provided on a minor street.

1.4.10 Lot of Record

A lot or tract of land, described by deed and/or subdivision plat, filed in the Register's Office, Williamson County, Tennessee.

1.4.11 Plat, Final

A map of a land subdivision prepared in a form suitable for filing of record with necessary affidavits, dedications and acceptances and with complete bearings and dimensions of all lines defining lots and blocks, streets and alleys, public areas and other dimensions of land.

1.4.12 <u>Plat, Preliminary</u>

A map of a proposed land subdivision showing the character and proposed layout of the tract in sufficient detail to indicate the suitability of the proposed subdivision of land.

1.4.13 Street

A public right-of-way which affords the primary means of access to abutting property.

1.4.14 Street, Arterial

A street designed and intended for use by large volumes of through traffic; receives traffic flow from collector and local streets, allows for major movement between areas of the City and usually has heavy traffic moving at relatively high speeds.

1.4.15 Street, Collector

A street which carries traffic from local streets to the arterial system; consists of principal entrance streets for residential, commercial and industrial developments and provides for major circulation within such developments.

1.4.16 Street, Cul-de-Sac

A local street having one (1) end open to vehicular traffic but having the other end closed.

1.4.17 Street, Frontage or Service

A local street auxiliary to and located on the side of an arterial or collector street to provide service to abutting properties and to control access to arterial and collector streets.

1.4.18 Street, Local

A street used primarily for access to abutting properties and designed to discourage use by through traffic; may consist of deadend or cul-de-sac streets designed so that they cannot be extended in the future and may be marginal access streets which are parallel and adjacent to arterial streets.

1.4.19 Subdivider

An person, firm, partnership, corporation or other entity, acting as a unit, subdividing or proposing to subdivide land.

1.4.20 Subdivision

The division of a tract or parcel of land into two (2) or more lots, sites or other divisions requiring new street or utility construction, or any division of five (5) acres or less for the purpose, whether immediate or future, of sale of building development, and includes resubdivision and when appropriate to the context, relates to the process of resubdividing or to the land or areas subdivided.

1.5 General Procedure

1.5.1 Plat Approval

The procedure for review and approval of a subdivision plat consists of two steps. The initial step is the preparation and submission to the Planning Commission of a preliminary plat of the proposed subdivision. The second step is the preparation and submission to the Planning Commission of a final plat, together with required certificates. The final plat becomes the instrument to be recorded in the office of the County Register, after being signed by the Secretary of the Planning Commission.

1.5.2 Official Recording

No subdivision plat or other land subdivision instrument shall be filed in the Office of the County Register until it shall have been approved by the Planning Commission. All final plats shall be filed within one (1) year of the date of approval by the Planning Commission, and no lots shall be sold from any plat until recorded. Failure to record the final plat within one (1) year of the date of Planning Commission approval shall void the approval of the final plat.

1.5.3 Agenda

Each subdivision plat submitted for preliminary or final approval shall be placed on the agenda of the Planning Commission only after fulfilling the requirements of these regulations and the appropriate checklist. Preliminary and final subdivision plats shall not be placed on the same agenda. Plat checklists may be obtained from the Planning Department. The procedure for plat preparation and approval is set forth in Section 4.

2. DESIGN

2.1 <u>Urban Design Principles</u>

The quality of design of the City is dependent on the quality of design of the individual subdivisions that compose it. Land to be subdivided shall be of such character that it can be used safely for building purposes without danger to health or peril from fire, flood or other menace. The arrangement of lots, blocks and the street system should be designed to make the most advantageous use of topography and natural physical features. Tree masses and large individual trees should be preserved. The system of sidewalks, streets and lot layouts should be designed to take advantage of the visual qualities of the area.

Circulation within the City shall be provided in accordance with the following design criteria:

- (1) Each subdivision shall provide for the continuation of all arterial streets as shown on the Major Thoroughfare Plan, filed in the Office of Register, Williamson County, Tennessee. Arterial streets should be located on the perimeter of the neighborhood.
- (2) Local streets should be designed to provide access to each parcel of land within the neighborhood and in a manner to discourage use by through traffic. They should be planned so that future urban expansion will not require the conversion of local streets to collector or arterial streets.
- (3) Collector streets should be designed to provide a direct route from local streets to the collector and arterial street systems.
- (4) Ingress and egress to properties should be provided only on local or collector streets.

2.2 <u>Subdivision Design Standards</u>

2.2.1 Streets

The arrangement, character, extent, width, grade and location of all streets shall conform to all of the elements of the Land Use Plan and shall be designed in accordance with the following provisions:

(1) Collector and arterial streets shall be planned to conform with the latest adopted revision of the Major Thoroughfare Plan.

- (2) Whenever a subdivision abuts or contains an existing or proposed collector or arterial street, the Planning Commission may require service streets, reverse frontage with screen planting contained in a non-access reservation along the rear property line, deep lots or such other treatment as may be necessary for adequate protection of properties and to afford separation of collector and arterial traffic from local traffic.
- (3) Local streets shall be laid out so that their use by collector or arterial traffic will be discouraged.
- (4) Where a subdivision borders on or contains a railroad right-of-way or limited access right-of-way, the Planning Commission may require a street approximately parallel to and on each side of such right-of-way at a distance suitable for the appropriate use of the intervening land. These distances shall be determined with due regard for the requirements of approach grades and future grade separation structures.
- (5) There shall be no private streets platted in any subdivision. Every subdivided property shall be served from a publicly dedicated street. There shall be no reserve strips controlling access to streets, except where the control of such strips is definitely placed with the community under conditions approved by the Planning Commission.
- (6) Where the plat to be submitted includes only part of the tract owned or intended for development by the subdivider, a tentative plan or a proposed future street system for the unsubdivided portion shall be required of the subdivider.
- (7) When a tract is subdivided into larger than normal building lots or parcels, such lots or parcels shall be arranged to permit the logical location and opening of future streets and appropriate resubdivision, with provision for adequate utility easements.
- (8) Street jogs with centerline offsets of less than one hundred twenty-five (125) feet shall be prohibited.
- (9) Street right-of-way widths shall be in accordance with the Major Thoroughfare Plan or, where not designated therein, shall not be less than that shown in Table 1: Street Design Standards.

- (10) The paved width of all streets shall be adequate to serve the existing and future estimated traffic load for the facility. Lane widths shall not be less than that shown in Table 1: Street Design Standards.
- (11) Each cul-de-sac shall be provided with a turnaround having a pavement radius of at least forty (40) feet. The right-of-way radius shall be at least fifty (50) feet in areas where there is no adjacent public utility and access easement and at least forty-five (45) feet where public utility and access easements are required and provided.
- (12) No street names shall be used which will duplicate or be confused with the names of existing streets, irrespective of the use of the suffix: street, avenue, boulevard, driveway, place, court, etc. Proposed streets which are obviously in alignment with others already existing and named shall bear the names of existing streets. All street names shall be subject to the approval of the Planning Commission.
- (13) Grades on arterial streets shall not exceed seven (7) percent. Grades on collector streets shall not exceed ten (10) percent. Grades on local streets shall not exceed fourteen (14) percent. The minimum grade for a street with curbs shall be one-half (0.5) percent.
- (14) Where a deflection angle of more than ten (10) degrees in the alignment of a street occurs, a curve of reasonably long radius shall be introduced. On streets sixty (60) feet or more in width, the centerline radius of curvature shall not be less than three hundred (300) feet; on all other streets the centerline radius of curvature shall not be less than one hundred (100) feet.
- (15) All changes in grade shall be connected by vertical cures of minimum length in feet equal to fifteen (15) times the algebraic difference in rates of grades for collector and arterial streets and one-half (0.5) this minimum length for other streets. Profiles of all streets showing natural and finished grades drawn to a scale of not less than one inch equal one hundred feet (1"=100") horizontal and one inch equal twenty feet (1"=20") vertical may be required by the Planning Commission.

- (16) Street intersections shall be as nearly at right angles as possible, and no intersection shall be at an angle of less than sixty (60) degrees. Property line radii at street intersections shall not be less than twenty (20) feet, and, where the angle of street intersection is less than seventy-five (75) degrees, the Planning Commission may require a greater curb radius. Wherever necessary to permit the construction of a curb having a desirable radius without curtailing the sidewalk at a street corner to less than normal width. The property line at such street corner shall be rounded or otherwise set back sufficiently to permit such construction.
- (17) A tangent of at least one hundred (100) feet shall be introduced between all reverse curves on arterial and collector streets.

2.2.2 Blocks

- (1) The lengths, widths and shapes of blocks shall be determined with due regard for the following:
 - a. Provision of adequate building sites suitable to the special needs of the type of use contemplated.
 - b. Zoning requirements as to lot sizes and dimensions.
 - c. Needs for convenient access, circulation, control and safety of street traffic.
 - d. Limitations and opportunities of topography.
- (2) Blocks for residential use shall not be shorter than four hundred (400) feet nor longer than eighteen hundred (1,800) feet, measured along the centerline of the block. When a block exceeds six hundred (600) feet in length, the Planning Commission may require a dedicated easement of not less than fifteen (15) feet in width and a paved crosswalk of not less than four (4) feet in width to provide pedestrian access across the block.
- (3) Blocks used for residential purposes should be of sufficient width to allow for two tiers of lots of appropriate depth but should not be less than two hundred twenty (220) feet in width.

2.2.3 Lots

- (1) In residential subdivisions, landscape easements, signage easements, and landscape buffer areas shall be platted as separate nonbuildable lots which shall be maintained by the homeowners association.
- (2) Side lot lines shall be approximately at right angles or radial to street lines.
- (3) In residential subdivisions where septic tanks or individual sewage disposal devices are to be installed, the area of the lot shall be not less than forty thousand (40,000) square feet, and the width of the lot at the front building line shall be not less than one hundred (100) feet.
- (4) 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 reasonably 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 shall be used to comply with all applicable public health regulations.
- (5) Greater area may be required for private sewage disposal systems if, in the opinion of the County Health Officer, there are factors of drainage, poor soil porosity or other conditions to cause potential health problems. The Planning Commission may require that data from percolation tests be submitted, along with the plat, in those cases where its approval is contingent upon septic tanks as a means of sewage disposal.
- (6) The minimum size of residential lots to be served by a private source of water supply shall be sixty thousand (60,000) square feet, unless it is determined by the County Health Officer that a larger lot is required after investigations of soil conditions, the proposed sewerage system and the depth of ground water. The width of the lot at the front building line shall be not less than one hundred (100) feet.
- (7) Nonresidential lots shall be adequate in size to provide for 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 and should provide insulation against adverse effects on present or future adjacent residential development.

(8) Double frontage and reverse frontage lots should be avoided, except where they are needed to provide for the separation of development from traffic arteries or to overcome specific disadvantages of topography and orientation. A planting screen easement at least twenty (20) feet wide shall be provided along the portion of the lots abutting such a traffic artery or other use where screening is required. There shall be no right-of-access across a planting screen easement.

2.2.4 Alleys

Except as modified by the Planning Commission, alleys shall be provided in commercial and industrial subdivisions, except that the Planning Commission may waive this requirement where other definite and assured provision is made for service access, such as off-street loading, unloading and parking consistent with and adequate for the use proposed. Alleys serving commercial and industrial subdivisions shall be not less than thirty (30) feet in width. Alleys are not required for residential areas, but, when provided, shall be not less than twenty (20) feet in width. Alley intersections and sharp changes in alignment should be avoided, but, where necessary, corners shall be cut sufficiently to permit safe vehicular movement. Dead-end alleys should be avoided, but, if necessary, shall be provided with adequate turnaround facilities at the dead-end, as determined by the Planning Commission.

2.2.5 Suitability of the Land

- (1) The Planning Commission shall not approve the subdivision of land if, after adequate investigations have been conducted by the public agencies concerned, the Planning Commission determines that, in the best interest of the public, the particular site is not suitable for the type of platting and development proposed.
- (2) All subdivision proposals shall be consistent with the need to minimize flood damage.

- (3) All subdivision proposals shall have public utilities and facilities, such as sewer, gas, electrical and water systems, located and constructed so as to minimize flood damage.
- (4) All subdivision proposals shall have adequate drainage provided to reduce exposure to flood damage.
- (5) All subdivision developments and other proposed developments greater than fifty (50) lots or five (5) acres, whichever is the lesser, and to be located in unnumbered A Zones, shall include within such proposals base flood elevation data.
- (6) In the absence of specific data in unnumbered A Zones as depicted on the maps which form a part of the <u>Flood Insurance Study</u>, <u>City of Franklin</u>, <u>Tennessee</u>, <u>Williamson County</u>, dated March 22, 1979, and as subsequently amended, any base flood evaluation data available from a Federal, State or other source should be utilized until such other data has been provided by the Federal Emergency Management Agency.
- (7) All proposed developments containing Floodplain areas shall be guided and controlled by the Flood Insurance Study, which is the study presented to the City at a public hearing May 24, 1979. The Floodway and Floodway Fringe areas placed on the Zoning Map are meant to be the same areas expressly delimited in this study which is entitled <u>Flood Insurance Study</u>, City of Franklin, Tennessee, Williamson County, dated March 22, 1979, and subsequently amended, and which study is made a part of the Subdivision Regulations as if set forth herein verbatim.
- (8) Any development of more than five (5) acres and within or adjacent to a flood-prone area, as designated on the maps of the Federal Emergency Management Agency, must have established, at locations approved by the City, permanent elevation benchmarks referenced to the U.S.G.S. datum. The benchmarks shall be bronze markers mounted in concrete and installed in protected, accessible locations approved by the City. Each benchmark elevation shall be stamped on the bronze marker. The development shall have installed sufficient benchmarks such that no building site is more than one thousand five hundred (1,500) feet from a permanent benchmark.

2.2.6 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 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 to be located in whole or in part within the subdivision, the Planning Commission may require the dedication or reservation of such open space up to a total of ten (10) percent of the gross subdivision area or water frontage for park, school or recreational purposes.

(2) Easements

The Planning Commission may require easements for utilities and drainage of sufficient widths to permit access for the purpose of construction and maintenance by appropriate parties along the lines of, or across, lots.

(3) Community Assets

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.

(4) Restriction of Access

When a subdivision fronts on an arterial street, the Planning Commission may require lots to be provided with frontage on a marginal access street.

3. DEVELOPMENT PREREQUISITE TO FINAL APPROVAL

3.1 <u>Required Improvements</u>

Final plat approval shall be subject to the completion of required improvements. No final plat shall be approved by the Planning Commission or accepted for recording by the Williamson County Register of Deeds until the required improvements, described in the following paragraphs, are constructed in a satisfactory manner in accordance with specifications established by the City, or in lieu of completed improvements, the Planning Commission may approve a performance bond in an amount equal to the cost of installation of the required improvements.

3.1.1 Monuments

Concrete monuments four (4) inches in diameter or square and three (3) feet long with a flat top shall be set at all street corners, at all points where the street lines intersect the exterior boundaries of the subdivision and at angle points and points of curve in each street. The top of the monument shall have an indented cross to properly identify the location and shall be set flush with the finished grade.

3.1.2 Pins

All other lot corners shall be marked with iron pins not less than three-fourths (0.75) inch in diameter and twenty-four (24) inches long and driven so as to be flush with the finished grade.

3.1.3 Grading

All streets and alleys shall be graded so that pavements and sidewalks can be constructed to the required cross section. Deviation from the above due to special topographical conditions will be allowed only with approval of the Planning Commission. Where streets are constructed under or adjacent to existing electric transmission lines or over gas transmission lines, the nearest edge of the pavement shall be a minimum of fifteen (15) feet from any transmission line structure, and all grading for the street shall be done in a manner which will not disturb the structure or result in erosion endangering the structure. In the case of electric transmission lines, the clearance from the pavement to the nearest conductor shall meet the requirements of the National Electrical Safety Code.

(1) Preparation

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

(2) Cuts

Tree stumps, boulders and other obstructions shall be removed to a depth of two (2) feet below the sub grade. Rock shall be scarified to a depth of twelve (12) inches below the sub grade.

(3) Fill

Suitable material from roadway cuts may be used in the construction of fills, approaches and other places as needed. Excess materials, including organic materials, soft clays, etc., shall be removed from the site. The fill shall be spread in layers not to exceed twelve (12) inches loose and compacted by a sheep's foot to no less than ninety-five (95) percent compaction. The filling of utility trenches and other places not accessible to a roller shall be mechanically tamped, but, where water is used to assist compaction, the water content shall not exceed the optimum of moisture.

3.1.4 Storm Drainage

- (1) An adequate drainage system, including open ditches, pipes, culverts, intersectional drains, drop inlets, bridges and so forth, shall be provided for the proper drainage of all surface water and shall be completely separate from any sewage disposal system, regardless of the source of the sewage.
- (2) The construction standards and specifications for the storm drainage system shall be recommended by the Street Department and approved by the Board of Mayor and Aldermen.
- (3) Drainage systems for new developments shall be designed so that surface runoff from one lot, parcel or tract will not damage downstream property, including any existing public or private drainage system.

If necessary to prevent damage to property or to prevent overloading an existing downstream drainage system, drainage system design for new developments shall incorporate features

which limit the rate of runoff to no more than that which existed before development occurred.

(4) Drainage system design shall result in safe, adequate, aesthetically pleasing and easily maintained facilities.

Where piped systems are used, adequate provisions shall be made for access by maintenance personnel and equipment. Provisions shall be made to discourage or to prevent the entrance of objects and material potentially damaging to the storm drainage system or to prevent the entrance of people or animals, especially in times of rainfall when the system is carrying large volumes of water at high velocities.

Where open ditches are used, they shall be as shallow as feasible with side slopes flat enough to allow maintenance with a hand mower. Appropriate erosion protection measures shall be incorporated in the design and construction of the drainage system and shall be based on soil characteristics as well as the volume and velocity of expected storm water flow.

Open ditches will not be permitted where their use, in the opinion of the reviewing authority, would result in danger to life or property or where their use is aesthetically inappropriate or will create excessive maintenance problems.

Drainage must be confined to appropriate areas intended to receive storm water runoff with adequate easements for replacement and maintenance.

3.1.5 Streets

(1) Pavement Base

After preparation of the sub grade, the roadway base shall be installed in accordance with the standards and specifications of the Street Department. The base construction shall be inspected by the Street Department and approved prior to placement of the traffic-bearing surface. Width of base shall be as specified by the Street Department for various classifications of streets.

(2) Pavement Surface

The pavement surface shall be in accordance with the standards and specifications of the Street Department. Pavement surface shall consist of asphaltic concrete unless otherwise approved by the Street Department.

(3) Pavement Widths

Pavement widths shall conform to Street Department Standards and shall be in accordance with the Street Design Standards shown in Table 1 and the Street Cross Sections shown in figures 1, 2, 3 and 4. Street classifications shall be as established in the Major Thoroughfare Plan or by the Planning Commission.

(4) Curbs

Curbs shall be provided on all streets except those designated by the Planning Commission to have open roadside drainage swales or ditches. Curbs shall be constructed in accordance with the Street Department Standards, and the construction material shall be Portland cement concrete. Curbs in residential areas may be mountable type without integral gutter. Curbs in commercial and industrial areas or on streets routinely carrying commercial or industrial traffic shall be barrier type, at least six (6) inches in height at the curb face. Barrier curbs with integral gutter shall be used in areas designated by the Planning Commission or as shown in Table 1: Street Design Standards.

(5) Bikeway Standards

Lane marking for new major and minor arterial and collector streets with four (4) or more driving lanes shall be done so as to provide additional space in the right, or outside, lanes in order to accommodate both bicycle and motorized vehicle traffic. This shall be accomplished by marking the left, or inside, lanes at eleven (11) feet wide and the right, or outside, lanes at thirteen (13) feet wide.

3.1.6 <u>Sidewalks</u>

(1) Sidewalks shall be required in all residential and commercial subdivisions with the exception of those subdivisions:

- a. whose preliminary plats were approved prior to March 6, 1986; or
- b. that are final plats of additional sections of a subdivision where sidewalks are not constructed in previously recorded sections.
- c. that are located in the Estate Residential (ER) Zoning District.
- d. that are residential subdivisions containing no more than two (2) lots. An access and utility easement shall still be required. If further subdivision takes place, then sidewalks for the entire subdivision shall be installed.
- e. that are commercial subdivisions, in which case sidewalks do not have to be constructed or bonded until after site plan approval. In lieu thereof, an amount equal to the cost of sidewalk construction may be placed in a capital improvements escrow account for sidewalks, if approved by the Planning Commission.
- f. where lots front on only one (1) side of the street, then sidewalks shall be required only on the side of the street with lot frontage.
- (2) Sidewalks shall be a minimum of five (5) feet in width. The material used shall be Portland cement concrete, and construction details will be as developed or as approved by the Street Department. Sidewalks shall be placed in an access and utility easement adjacent to the street right-of-way line, with maintenance responsibility assigned to the property owner (see Typical Location Drawing on page 3-10)
- (3) The Planning Commission may approve an alternate pedestrian walkway system for a given development. For example, internal walkways may be considered instead of alongside streets.

3.1.7 <u>Water Supply System</u>

The construction standards and specifications for the water supply system shall be as established by the Water Department.

3.1.8 <u>Sanitary Sewerage System</u>

The construction standards and specifications for the sanitary sewerage system shall be established by the Sewer Department.

3.1.9 Fire Hydrants

Fire hydrants shall be placed no more than four hundred (400) feet from a single family lot and no more than two hundred fifty (250) feet from a multifamily lot.

3.1.10 Street Lighting

The subdivider shall bear the financial responsibility for the original installation costs for the materials and labor for street lighting where it is deemed reasonably necessary by the Street Department. Street lighting shall be of such size and specifications as deemed appropriate by the Street Department to meet the specific requirements of the subdivision. Street lights shall be installed between the curb and the sidewalk.

3.1.11 <u>Street Sign Poles and Street Signs</u>

The subdivider shall bear the financial responsibility for the original installation costs for the materials and labor for the placement of street identification signs and street sign poles required in the subdivision. The poles and signs so installed shall be of such size and specifications as deemed appropriate by the Street Department to meet the specific requirements of the subdivision.

3.1.12 Underground Utilities

Within a subdivision, and for off-site lines constructed as a result of, or to provide service to, a subdivision, all utilities, such as cable television, electrical (excluding transformers), gas, sewer, telephone, and water lines shall be placed underground, with the exception of Light Industrial (LI) and Heavy Industrial (HI) Districts, where their off-site lines may be overhead.

3.2 Maintenance and Supervision

Where the subdivision contains sewers, sewage treatment plants, water supply systems or other facilities necessary or desirable for the welfare of the area, or that are of common use or benefit but cannot satisfactorily be maintained by an existing public agency, provisions shall be made which are acceptable to the agency having jurisdiction over the location and maintenance of such facilities

for the proper and continuous operation, maintenance and supervision of such facilities.

3.3 <u>Improvements, Performance Bonds and Maintenance Bonds</u>

3.3.1 Completion of Improvements

Before a final subdivision plat is signed by the Secretary of the Planning Commission, the subdivider shall be required to:

- (1) complete improvements, based on the recommendations of City departments and in accordance with the requirements of the Planning Commission, or
- (2) post a performance bond to insure the construction, installation or dedication of improvements.

3.3.2 <u>Performance Bond</u>

- (1) The Planning Commission may waive the requirement that the subdivider complete and/or dedicate all public improvements and landscaping prior to being issued a building permit and allow the subdivider, in the alternative, to post a performance bond in order to insure the construction, installation and/or dedication of all required public improvements and landscaping. The bond shall be in the amount of one hundred ten (110) percent of the actual estimated cost as determined by the Planning Commission and based on the recommendations of City departments. The performance bond shall also secure all lot improvements and private access improvements required pursuant to these regulations, including necessary off-site improvements.
- (2) The period within which required improvements shall be completed shall be specified by the Planning Commission, incorporated in the performance bond and shall not exceed two (2) years from the date of final approval of the plat.
- (3) The performance bond shall name the Planning Commission and/or the City as obligees and shall be satisfactory to the City Attorney as to form, sufficiency and manner of execution.
- (4) The performance bond shall remain in force in its full face amount until the landscaping improvements are completed and accepted by the planning department and until the public improvements are completed and accepted by the Engineering

Department. The surety securing the performance bond may be reduced as provided below.

3.3.3 Surety

A performance bond authorized by the Planning Commission shall be secured by either an irrevocable letter of credit, a cashier's check or other method of surety agreement deemed adequate by the Planning Commission. The beneficiary of the surety shall be the Planning Commission and/or the City. The financial institution shall not issue a surety for more than ten (10) percent of its total capital to an applicant. The financial institution shall allow the surety to be presented for collection at a place physically located within the City of Franklin, Tennessee.

3.3.4 Reduction or Release of Performance Agreement and Surety

The performance agreement may be reduced one (1) time when at least fifty (50) percent of a public improvement, or the landscaping, has been completed. The performance agreement, and the surety securing it, may be released upon acceptance of the public improvements and/or the landscaping. Final topping of a street may be permitted when at least 90% of the lots in the subdivision, or the section or sections thereof for which the performance agreement was established, have been built out, that is, certificates of occupancy have been issued for the homes located on the lots in question. The Performance agreements for street improvements may be released when final topping is completed and accepted, provided that a maintenance agreement is established.

- (1) A request for extension or reduction of the surety or release of the performance bond shall not be submitted until:
 - a. the subdivider has presented a letter to the Planning Department requesting extension or reduction of the surety or release of the performance bond;
 - b. the request, except for landscaping improvements, is forwarded by the Planning Department to the City Engineer;
 - c. the City Engineer, representing City departments, has submitted a statement to the Planning Department indicating that the required public improvements have been satisfactorily completed; and

- d. assurances have been obtained through either affidavits, releases or waivers of liens from all contractors and subcontractors of the filing of public disclaimers, that liens will not be filed against the dedicated land and/or improvements after they are accepted.
- (2) At the time an extension or reduction is approved, then the Planning or Engineering Department, whichever is applicable, shall establish the expiration date of the surety given to secure the extended or reduced bond amount. However, the new surety shall not have an expiration date of less than six (6) months. No performance bond shall be reduced to less than ten (10) percent of its full face amount, irrespective of the estimated cost of completing the improvements.
- (3) The approval of a plat shall not constitute or imply the acceptance by the City of landscaping or any public improvement shown on the plat. The Planning Commission may require the plat to be endorsed with appropriate notes to this effect.
- (4) The costs incurred in connection with a request for extension or reduction of the surety or release of the performance bond and surety (that is, engineering inspection fees, legal fees, and so forth) shall be borne by the subdivider, regardless of whether the request is ultimately granted. No bond shall be released until the City Recorder certifies that all fees have been paid.
- (5) A bond agenda shall be published in at least one (1) local newspaper no less than four (4) calendar days prior to the regular meeting of the Planning Commission.

3.3.5 <u>Failure to Complete Improvements</u>

Where a performance bond has been posted, and required improvements have not been installed within the terms of the performance bond, then the Planning Commission may declare the bond to be in default and authorize the calling of the bond and surety and the completion of the improvements under the supervision of City departments.

3.3.6 Maintenance Bond

The subdivider shall be required to maintain the completed landscaping or public improvements until acceptance of the

improvements by the Planning or Engineering Department, respectively. After acceptance and release of the performance bond, then a maintenance bond shall be imposed. The maintenance bond shall be for the purpose of guaranteeing the completed improvements against defects in workmanship and/or materials and shall remain in effect for a period of one (1) year, or until final release, whichever period is longer.

3.3.7 Appeal to the Planning Commission

The subdivider may, upon disapproval of a request for extension, reduction or release of a bond, appeal the decision of the Planning or Engineering Department to the Planning Commission. The appeal shall be filed within ten (10) days of the adverse decision and shall be set for hearing on the next regular meeting agenda of the Planning Commission.

4. PLAT PREPARATION AND APPROVAL PROCEDURE

4.1 Preliminary Plat

4.1.1 General

The subdivider shall prepare a preliminary plat for submission to the Planning Commission in accordance with the latest preliminary plat checklist, which may be obtained from the Planning Department. Regular meeting dates and time, and the deadline for each regular meeting, shall be established by the Planning Commission. The applicant shall notify, by mail, property owners located within five hundred (500) feet of any proposed development requiring the submittal of a preliminary plat. Such notification shall contain the time and place of any Planning Commission meeting at which the proposed development will be considered. The applicant shall submit a certificate to the Planning Department stating that letters have been sent by first class, postage-paid, mail to the neighboring property owners, the names of the property owners shall be listed and one copy of the letter shall be included with the certificate.

4.1.2 Preliminary Plat Fee

A nonrefundable preliminary plat fee shall be paid to the City at the time the preliminary plat is submitted to the Planning Department. Preliminary plat fees shall be charged according to the current fees ordinance.

4.1.3 Contents of the Preliminary Plat

The preliminary plat should be drawn on reproducible material suitable for making blue line prints and shall contain the following information, if applicable;

- (1) Name of the subdivision, with revision number, if any. Individual neighborhood names within large developments shall be shown on the plat at the time of submittal.
- (2) Certification of design signed by the surveyor or engineer preparing the plat which contains the following information: "I, _______, have, to the best of my ability, designed this subdivision in accordance with the ordinances and regulations governing the subdivision of land within the City of Franklin, and with the Franklin Land Use Plan, with which I am familiar."

(3)	North point.
(4)	Drawn to a scale of one (1) inch equals one hundred (100) feet. Any other scale shall be approved by the Planning Department.
(5)	Key map. Indicate either:
	a. Scale: 1" =', or
	b. Not to Scale, or
	c. N.T.S.
	d. Boundaries and number of acres in the drainage area(s) within which the subdivision will be developed.
	e. Corporate limit line, if falling within or immediately adjoining the subdivision.
(6)	City.
(7)	County.
(8)	State.
(9)	Civil district.
(10)	Date.
(11)	Total acres in the subdivision and the existing map, group, and parcel numbers from which the subdivision, resubdivision, or revision will be created.
(12)	Owner.
	a. Name, address and telephone number.
	b. Where such owner is designated as a partnership, corporation or other business venture, the names and addresses of all individual parties, officers and directors, and/or beneficial owners holding more than a five percent (5%) interest in the project shall be identified.
(13)	Subdivider.
	a. Name, address and telephone number.

b. Where such subdivider is designated as a partnership, corporation or other business venture, the names and addresses of all individual parties, officers and directors, and/or beneficial owners holding more than a five percent (5%) interest in the project shall be identified.

(14) Surveyor.

- a Name
- b. Address.
- c. Telephone number.
- d. Seal.
- (15) Existing zoning: Example: Low Density Residential (R-1).
- (16) Minimum required setback lines.
 - a. Yard fronting on any street.
 - b. Side yard.
 - c. Rear yard.
- (17) Floodway (F-W) and Floodway Fringe (F-F) boundaries, with elevations referenced to, and showing the exact location of, the nearest benchmark.
- (18) Contour lines at two- (2) foot intervals.
- (19) Boundary lines of properties and subdivision lines and names and/or property owners adjoining, but not a part of, the subdivision, shown with dashed lines.
- (20) Lengths of the boundaries of the subdivision, measured to the nearest foot, with calls.
- (21) Lot dimensions to the nearest foot.
- (22) Square feet of each lot.
- (23) Lot numbers.

- (24) Location of dedicated streets where they adjoin, or are adjacent to, the subdivision.
- (25) Dimension from the nearest existing street intersection centerlines to the nearest proposed street centerline, or to the nearest lot line if no streets are proposed.
- (26) Street classification of each street within or adjacent to the subdivision in accordance with intended use based on design, such as private, local, collector, or arterial, which shall be shown within parentheses next to the existing and proposed street names.
- (27) Street widths.
- (28) Alley widths.
- (29) Existing structures and buildings, including the exact locations and dimensions of historical structures and sites.
- (30) Proposed method of runoff disposal.
- (31) Existing and/or proposed water courses.
- (32) Existing and/or proposed drainage channels and subsurface drainage structures.
- (33) Approximate size, type and location of any other surface or subsurface structures existing within or immediately adjacent to the subdivision.
- (34) Public utility and drainage easement locations and sizes, whether they are to be located within or outside the subdivision.
- (35) Existing and proposed public utility locations, sizes and types.
 - a. Water lines.
 - b. Fire hydrants.
 - c. Sanitary sewers.
 - d. Storm sewers.
 - e. Culverts.

- f. Street lights, as submitted to Middle Tennessee Electric Membership Corporation.
- g. Other utilities affecting the site.
- (36) Two (2) prints must be delivered to the Williamson County Emergency Management Agency, and have the following checked, in order to eliminate duplications and/or to have the following assigned:
 - a. Subdivision name.
 - b. Street names.

4.1.4 <u>Planning Commission Action</u>

The Planning Commission shall approve, approve conditionally or disapprove the preliminary plat within thirty (30) days of the date of its submission. If no action is taken by the Planning Commission by the end of the thirty- (30) day period after submission, then the preliminary plat shall be deemed to have been approved, and a certificate to that effect shall be issued by the Planning Commission on demand; provided however, that the applicant may waive this requirement and consent to an extension of such period. If the preliminary plat is approved conditionally or disapproved, the reasons for conditional approval or disapproval shall refer specifically to those regulations with which the preliminary plat does not conform. On conditional approval, the Planning Commission may require the submission of a revised preliminary plat. If the preliminary plat conforms to all standards, or if the Planning Commission and the applicant agree to conditional approval, the subdivider may proceed with constructing the subdivision and/or preparing construction plans and the final plat. A preliminary plat and a final plat for the same development shall not be submitted to the Planning Commission for action at the same meeting.

4.1.5 Two-Lot Subdivisions

Subdivisions having only two (2) lots shall not be required to submit preliminary subdivision plats.

4.2 Final Plat

4.2.1 General

The subdivider shall prepare a final plat for submission to the Planning Commission in accordance with the latest final plat checklist, which may be obtained from the Planning Department. Regular meeting dates and times and the deadline for each regular meeting shall be established by the Planning Commission.

4.2.2 Time of Submission

A nonrefundable final plat fee shall be paid to the City at the time the final plat is submitted to the Planning Department. Final plat fees shall be charged according to the current fees ordinance. Final plats for all lots shown on the preliminary plat shall be submitted to the Planning Commission for approval within two (2) years of the date on which the preliminary plat was approved. If not submitted for final approval within such time, the remaining lots on the preliminary plat shall be considered as having been disapproved unless the Planning Commission agrees to an extension of time. Final plats shall be filed in the Register's Office, Williamson County, Tennessee, within one (1) year after approval by the Planning Commission; if not filed within such time, said approval shall be considered as having been voided.

4.2.3 Contents of the Final Plat

Final plat mylars may be purchased from the Planning Department, or the final plat shall be drawn on reproducible material suitable for making blue line prints, with outside dimensions of eighteen (18) inches by twenty-four (24) inches, and border dimensions of seventeen (17) inches by twenty-one (21) inches, with the border being one-half (0.5) inch from the top, the right-hand side and the bottom. The final plat shall contain the following information, if applicable.

- (1) Name of the subdivision, with section and revision number or other resubdivision indicators. Individual neighborhood names within large developments shall be shown on the plat at the time of submittal.
- (2) North point.
- (3) Drawn to a scale of one (1) inch equals one hundred (100) feet. Any other scale shall be approved by the Planning Department.

In the case of two- (2) lot subdivisions, the final plat shall be drawn to a scale sufficient to clearly delineate the subdivision.

(4) Key map. Indicate either:

a.

Scale: 1"=____', or

	b.	Not to Scale, or
	c.	N.T.S.
	d.	If more than two (2) sheets are required, a key map shall also be included, which shall show the sequential relation of each sheet.
	e.	Corporate limit line, if falling within or immediately adjoining the subdivision.
(5)	City.	
(6)	Cour	nty.
(7)	State	
(8)	Civil	district.
(9)	Date	
(10)	parce	l acres in the subdivision and the existing map, group, and el numbers from which the subdivision, resubdivision, or ion will be created.
(11)	Own	er.
	a.	Name, address and telephone number.
	b.	Where such owner is designated as a partnership, corporation or other business venture, the names and addresses of all individual parties, officers and directors, and/or beneficial owners holding more than a five (5) percent interest in the project shall be identified.
(12)	Subd	livider.

Name, address and telephone number.

Rev 6/20/02 4 - 7

a.

- b. Where such subdivider is designated as a partnership, corporation or other business venture, the names and addresses of all individual parties, officers and directors, and/or beneficial owners holding more than a five (5) percent interest in the project shall be identified.
- (13) Closure error.
- (14) Existing zoning: Example: Low Density Residential (R-1).
- (15) Minimum required setback lines.
 - a. Yard fronting on any street.
 - b. Side yard.
 - c. Rear yard.
- (16) Floodway (F-W) and Floodway Fringe (F-F) boundaries, with elevations referenced to, and showing the exact location of, the nearest benchmark
- (17) Boundary lines of properties adjoining, but not a part of, the subdivision, shown with dashed lines.
- (18) Adjoining property owners and/or subdivisions.
- (19) Lengths of the boundaries of the subdivision, measured to the nearest foot and decimals, with calls.
- (20) The lengths of all lines dimensioned in feet and decimals to the nearest hundredth of a foot.
- (21) Square feet and acreage of each lot.
- (22) Lot numbers.
- (23) The values of all true bearings and angles dimensioned in degrees and minutes.
- (24) Location of dedicated and proposed streets adjoining, adjacent to, or within the subdivision, with street names. Proposed street names shall be submitted to the Williamson County Emergency Management Agency for approval.

- (25) The dimension from the nearest existing street intersection centerlines to the nearest monument in the subdivision.
- (26) Street classification of each street within or adjacent to the subdivision in accordance with intended use based on design, such as private, local, collector or arterial, which shall be shown within parentheses next to the existing and proposed street names.
- (27) At all temporary turnarounds, a sign shall be placed stating, "Street to be extended by the authority of the City of Franklin."
- (28) Street widths.
- (29) Alley widths.
- (30) Acres of new streets.
- (31) Linear feet of new streets.
- (32) Curve data.
 - a. Angles.
 - b. Radii.
 - c. Tangents.
 - d. Lengths.
- (33) Existing structures and buildings, including the exact locations and dimensions of historical structures and sites.
- (34) Easements, with dimensions, and designated as to type (Example: Public utility and access easement, drainage easement, walkway and public access easement, etc.).
- (35) Existing and proposed public utility locations, sizes and types.
 - a. Water lines.
 - b. Fire hydrants.
 - c. Sanitary sewers.
 - d. Storm sewers.

- e. Culverts.
- f. Street lights.
- g. Other utilities affecting the site.

(36) Certifications.

- a. Certificate of ownership.
- b. Certificate of survey.
- c. Certificate of approval of water and sewer systems.
- d. Certificate of approval of streets and drainage.
- e. Certificate of approval for recording.
- f. Certificate of approval of subdivision name and street names.
- (37) Concrete monuments. In two- (2) lot subdivisions, at least two (2) concrete monuments shall be placed on the same line. In subdivisions having more than two (2) lots, concrete monuments shall be placed at all points where street lines intersect the exterior boundaries of the subdivision and at angle points and points of curve in each street.
- (38) Iron pins, which shall be placed at all lot corners.
- (39) The street address placed on each lot as assigned by the Franklin Planning Department.
- (40) Submit a copy of the final plat, in digital format, to the engineering department, with the following information:

- a. Use of Tennessee State plane coordinate system, Zone 5301, Fipszone 4100.
- b. NAD 83 datum.
- c. Use of feet as the unit of measure.
- d. Furnished in DXF or AutoCad r14 format.
- e. Delivered on CD-ROM, 3.5 floppy, superdisk, or ftp.
- f. Other information as requested by the engineering department.
- (41) Final plats shall contain the following note, unless the entire acreage of the plat is within a Heavy Industrial (HI) district:

Within new developments and for off-site lines constructed as a result of, or to provide service to, the new development, all utilities, such as cable television, electrical (excluding transformers), gas, sewer, telephone, and water lines shall be placed underground, with the exception of Light Industrial (LI) and Heavy Industrial (HI) Districts, where their off-site lines may be overhead.

Final plats shall also identify the existing and proposed locations, types, and sizes of the following:

- (a) Water lines.
- (b) Fire hydrants, dimensioned to the nearest corner of the lot.
- (c) Sanitary sewers.
- (d) Storm sewers.
- (e) Culverts.
- (f) Street improvements.
- (g) Electric Lines
- (h) Any other utilities or services affected by the site.

4.2.4 Planning Commission Action

The Planning Commission shall act upon the final plat within thirty (30) days after it has been submitted for final approval. This approval and the date thereof shall be shown on the plat over the signature of the Planning Commission Secretary. If no action is taken by the Planning Commission by the end of thirty (30) days after submission, the plat shall be deemed to have been approved. Failure of the Planning Commission to act thereon within such time shall be sufficient in lieu of written endorsement of approval. If the final plat is disapproved, grounds for this refusal shall be stated in writing. The reasons for disapproval shall refer specifically to those parts of the Land Use Plan, ordinances or regulations with which the plat does not comply.

4.2.5 Recording of Plat

After final approval of the plat and the affixing of all required signatures, in black permanent ink, on the original tracing, the applicant shall file the original tracing and three (3) blue line prints in the Register's Office, Williamson County, Tennessee.

4.2.6 Minor Revisions to Final Plats

If it becomes necessary for minor revisions to be made to an approved final plat, then the revisions may be made with the approval of the appropriate city department superintendents and the city engineer. If a proposed revision will, in the opinion of the appropriate city department superintendents and the city engineer, substantially affect the terms of the original approval, then a submittal to the planning commission shall be required.

4.3 Variations and Exceptions

Whenever a parcel of land to be subdivided is of such unusual size or shape, or is surrounded by such development of unusual conditions that the strict application of the requirements contained in these regulations would result in substantial hardship or inequity, the Planning Commission may vary or modify, except as otherwise indicated, such requirements of design, but not of procedure or improvements, so that the subdivider may develop the property in a reasonable manner, keeping in mind that the public welfare and interests of the City are protected and the general intent and spirit of these regulations are preserved. Such modifications may be granted by the Planning Commission upon written request by the subdivider, stating the reason(s) for each modification.

5. LEGAL STATUS

5.1 <u>Discrepancy With Other Regulations</u>

No subdivision of land within the force and effect of these regulations shall be approved unless it conforms to the Zoning Ordinance. Whenever there is a discrepancy between minimum standards or dimensions noted herein and those contained in the Zoning Ordinance, building codes or other regulations, the highest standard shall apply.

5.2 Validity

If any section, clause, paragraph, provision or portion of these Subdivision Regulations shall be held invalid or unconstitutional by any court of competent jurisdiction, such holding shall not affect any other section, clause, paragraph, provision or portion of these regulations.

5.3 Repeal

All Subdivision Regulations or amendments thereto previously in force are hereby repealed.

5.4 <u>Enforcement</u>

No plat or plan of a subdivision of land into two (2) or more lots located within the City shall be admitted to the land records of Williamson County, or be received or recorded by the Register's Office, Williamson County, 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. No board, public officer or authority shall light any street, lay or authorize the laying of water mains, sewers or the construction of other facilities or utilities in any street located within the City unless such street shall have been accepted, opened or otherwise received the legal status of a public street prior to the adoption of these Subdivision Regulations, or unless such street corresponds in its location and lines to a street shown on a subdivision plat approved by the Planning Commission or on a Major Thoroughfare Map made and adopted by the Planning Commission as provided in Section 13-4-307, Tennessee Code Annotated.

5.5 Penalties

- 5.5.1 The Register's Office, Williamson County, shall not receive, file or record a final plat of a subdivision of land within the City without the approval of the Planning Commission, as required in Section 13-4-302, Tennessee Code Annotated.
- 5.5.2 Section 13-4-306, 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 municipal Planning Commission and obtained its approval as required by this chapter and before such plat be recorded in the office of the appropriate 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 municipality, through its solicitor or other official designated by its chief legislative body may enjoin such transfer or sale or agreement by action for injunction."
- 5.5.3 Any building or structure erected or to be erected in violation of the Subdivision Regulations shall be deemed an unlawful building or structure, and the Building Inspector or other official designated by the Board of Mayor and Aldermen may bring action to enjoin such erection or cause it to be vacated or removed as provided in Section 13-4-308, Tennessee Code Annotated.

5.6 Adoption, Effective Date and Amendments

Before these Subdivision Regulations were adopted, a public hearing was held, as required by Section 13-603, <u>Tennessee Code Annotated</u>, at which time the opportunity was afforded any interested person(s) a chance to be heard. This hearing was held on Tuesday, April 5, 1966, at 9:00 a.m. at the city hall in Franklin, Tennessee. Notice of such hearing was announced in the <u>Review Appeal</u>, a newspaper of general circulation within the area of planning jurisdiction, on Thursday, March 3, 1966, stating the date, time and place of the hearing.

Adopted April 12, 1966 Effective April 15, 1966

6. CERTIFICATIONS

the way vide esta Cor area Pag furt	eon as of record in Book plan of subdivision of the ys and easements as noted ed, resubdivided, altered of ablished until otherwise mmission, and under no co a than is prescribed by the ye, R.O.W.C., Tenno	am (we are) the owner(s) of the property shown, Page, R.O.W.C, Tennessee, and adopt property as shown hereon and dedicate all public. No lot(s) as shown hereon shall again be subdir changed so as to produce less area than is hereby approved by the Franklin Municipal Planning ondition shall such lot(s) be made to produce less restrictive covenants as of record in Book, essee, running with the title to the property. I (we) no liens on this property, except as follows: Book
Ow	ner(s)	 Date
Cer	tificate of Survey	
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	of, 20 veyor	
Sur		
Sur Cer	veyor	
Sur Cert	veyor tificate of Approval of Watereby certify that: the water and sewer syst	

6.4 Certificate of Approval of Streets, Drainage, and Sidewalks I hereby certify that: (1) the streets, drainage, and sidewalks designated in ____ Subdivision have been installed in accordance with City specifications, or (2) a performance agreement and surety in the amount of \$_____ for streets, \$_____ for drainage, and \$_____ for sidewalks has been posted with the City of Franklin, Tennessee, to assure completion of such improvements. Director, Streets Department Date City of Franklin, Tennessee 6.5 Certificate of Approval for Recording Approved by the Franklin Municipal Planning Commission, Franklin, Williamson County, Tennessee, with the exception of such conditions, if any, as are noted in the Planning Commission minutes for the _____ day of _____, 20_____, and this plat has been approved for recording in the Register's Office of Williamson County. Secretary Date Franklin Municipal Planning Commission 6.6 Certificate of Approval of Subdivision Name, Street Names, and Addressing Subdivision name and street names approved by the Williamson County Emergency Management Agency. Williamson County Emergency Date Management Agency City of Franklin Date



Subdivision Regulations

Adopted by The City of Oak Hill Planning Commission on August 23, 2011

SUBDIVISION REGULATIONS

OF

CITY OF OAK HILL, TENNESSEE, MUNICIPAL PLANNING COMMISSION (HEREAFTER REFERRED TO AS THE PLANNING COMMISSION)

TABLE OF CONTENTS

SECTION ONE:	GENI	ERAL PROVISIONS
	1.1	Title
	1.2	Purpose
	1.3	Authority
	1.4	Jurisdiction
	1.5	Previously Approved Subdivisions
	1.6	Design Modifications
	1.7	Minimum Subdivision Plat Requirements
	1.8	Policy on Flood-Prone Areas
SECTION TWO:	PROC	CEDURES FOR PLAT APPROVAL
	2.1	Preliminary Meeting Required
	2.2	Formal Consideration
	2.3	Preliminary Plat Exemptions (Minor Subdivisions)
SECTION THREE:	PREL	IMINARY PLAT
	3.1	Application Procedure and Requirements
	3.2	Administrative Review
	3.3	Notice of Hearing
	3.4	Approval or Disapproval of Preliminary Plat
	3.5	Changes to the Plat
	3.6	Effective Period of Preliminary Approval
	3.7	Zoning Regulations
SECTION FOUR:	FINA	L PLAT
	4.1	Application Procedure and Requirements
	4.2	Endorsement of Notations
	4.3	Hearing and Decision on Final Plat
	4.4	Vested Rights
	4.5	Signing and Recording of Subdivision Plat
	4.6	Public Improvements
	4.7	Improvements and Performance Bond
	4.8	Inspection of Improvements
	4.9	Issuance of Building Permits and Certificates of Occupancy for
		Individual Lots
SECTION FIVE:	GENI	ERAL REQUIREMENTS AND MINIMUM STANDARDS OF
	DESI	GN
	5.1	General Requirements
	5.2	Lot Requirements
	5.3	Street Requirements

5.4 Private Street Requirements

SECTION SIX: DEVELOPMENT REQUIREMENTS FOR CERTIFICATE OF

COMPLETION

6.1 General

6.2 Required Improvements

6.3 Other Required Improvements

6.4 Construction Approval

SECTION SEVEN: LEGAL STATUS

7.1 Authority

7.2 Enforcement

7.3 Penalties

7.4 Adoption and Effective Date

SECTION EIGHT: SECURITY FOR COMPLETION AND MAINTENANCE OF

IMPROVEMENTS

8.1 Guarantee in Lieu of Completed Improvements

8.2 Failure to Complete Improvements

8.3 Completion of Approved Facilities within Designated Open

Space Areas

8.4 Inspection / Testing of Improvements

8.5 Maintenance Security

8.6 Maintenance of Improvements

APPENDIX A: DEFINITIONS

APPENDIX B: FORMS FOR FINAL PLAT CERTIFICATIONS

APPENDIX C: PRELIMINARY PLAT CHECKLIST

APPENDIX D: FINAL PLAT CHECKLIST

SECTION ONE: GENERAL PROVISIONS

- 1.1 <u>Title</u> These regulations shall hereafter be known and cited as the Subdivision Regulations of the City of Oak Hill, Tennessee ("the City").
- 1.2 <u>Purpose</u> The purpose of these Subdivision Regulations is to provide for the harmonious development of the City and its environs; to secure a coordinated layout with adequate provision for traffic, light and air, recreation, transportation, water, drainage, sewers, and other sanitary facilities and services; and to promote a distribution of population and traffic which will tend to create conditions favorable to health, safety, convenience and prosperity. Accordingly, these Subdivision Regulations set forth the procedures and minimum standards adhered to by developers of land for residential and commercial uses, and provide a guide for the Planning Commission and other City officials in exercising their duties pertaining to the review, approval and administration of land subdivision development within the jurisdiction of the City. The Subdivision Regulations are further intended to:
 - (1) Promote the orderly development of the City in accordance with the goals and objectives of the adopted comprehensive plan and approved updates.
 - (2) Establish efficient standards for the subdivision of land that further the orderly layout and use of land, and that ensure proper legal description and monumentation of subdivided property.
 - (3) Protect and conserve the value of land throughout the City and the value of buildings and improvements upon the land, and minimize the conflicts among the uses of land and buildings.
 - (4) Provide suitably located streets of sufficient design to accommodate existing and anticipated traffic, affording adequate access for emergency response vehicles and equipment to buildings.
 - (5) Encourage street design that moderates traffic speeds, reduces primary reliance on local streets, and increases primary reliance on collector and arterial streets.
 - (6) Protect the residential character of the City, and minimize the environmental and visual impacts of new development.
 - (7) Continue to enhance and expand the network of accessible open space throughout the City, preserving unique and sensitive community

resources such as groundwater, floodplains, streams, historic sites, steep slopes, woodlands and wildlife habitat.

- (8) Prevent the pollution, erosion and sedimentation of waterways and drainage facilities through efficient development management practice.
- (9) Promote interconnected greenways and corridors throughout the City, particularly in flood prone areas.
- (10) Ensure that new development will be required to bear its fair share of the costs of supporting the community through legally appropriate developer fees, land donations, and mitigation measures that address the public costs for new facilities and services.
- 1.3 <u>Authority</u> These subdivision regulations are adopted by the Planning Commission pursuant to the authority and powers granted by <u>Tennessee Code Annotated</u>, <u>Title 13</u>, <u>Chapter 4</u>, and may be amended by the Planning Commission after notice and a public hearing.
- 1.4 <u>Jurisdiction</u> These subdivision regulations shall apply to all subdivisions, as herein defined, located within the City of Oak Hill, Tennessee as now or hereafter established. No land shall be subdivided within the City except as permitted by these regulations.
- 1.5 Previously Approved Subdivisions
 - 1.5.1 <u>Unexpired Preliminary Approval</u> The preliminary approval granted on any plat prior to the effective date of these regulations shall remain in force and effect for the time period stipulated by the regulations under which the approval was first granted.
 - 1.5.2 <u>Expired Preliminary Approval</u> In any instance in which the period of preliminary approval shall have passed with all or some portion of the subdivision not having received final approval, and the applicant wishes an extension of the preliminary approval, the Planning Commission may:
 - (1) Permit the remaining portion of the subdivision to be constructed and to receive approval under provisions set forth in the regulations whereby preliminary approval was originally granted, or
 - (2) Stipulate that the plat is null and void and that a new plat be presented subject to the provisions of these regulations.

In making this determination, the Planning Commission shall consider all pertinent facts available to it. The current state and active pursuit of construction

and development activities within the subdivision shall be given due consideration in the course of the Planning Commission's deliberation on this question.

1.6 <u>Design Modifications</u>

- 1.6.1 General Where the Planning Commission finds that extraordinary hardships or practical difficulties may result from strict compliance with these regulations, a design modification may be granted from these regulations; provided, such modification shall not have the effect of nullifying the general intent and purpose of these regulations and provided, further, that the Planning Commission shall not consider modifications unless it shall make findings based upon evidence presented to it in each specific case that:
 - (1) The granting of the design modification will not be detrimental to the public safety, health, or welfare, or be injurious to other property or improvements in the neighborhood in which the property is located.
 - (2) The conditions upon which the request for a design modification is based are unique to the property for which the variance is sought and are not applicable generally to other property.
 - (3) Because of the particular physical surroundings, shape, or topographical condition of the specific property involved, a particular hardship (not self-imposed) to the owner would result, as distinguished from a mere inconvenience, if the strict letter of these regulations were carried out.
 - (4) The design modification will not in any manner alter the provisions of the land development plan, the Street Classification Plan, or the zoning ordinance.

Where the Planning Commission concludes that the purpose of these regulations may be specifically served to an equal or greater extent by an alternative proposal, condition, or circumstance, it may approve other design modifications to these regulations.

- 1.6.2 <u>Conditions</u> In approving design modifications, the Planning Commission may impose such conditions which in its judgment will substantially meet the objectives, standards, and requirements of these regulations.
- 1.6.3 Procedures Each and every design modification of these subdivision regulations sought by an applicant shall be specifically applied for in the numerical order of the subdivision regulations, in writing by the applicant in letter form. Any condition shown on the plat, which would require a design modification, shall constitute grounds for disapproval of the plat unless such special application for modification is made.

- 1.7 <u>Minimum Subdivision Plat Requirements</u> All subdivision plats and the traverse on which they are based shall meet the requirements established in the "Standards of Practice" adopted by the Tennessee Board of Examiners for Land Surveyors.
- 1.8 <u>Policy on Flood-Prone Areas</u> Any proposed subdivision that includes or abuts a flood-prone area shall provide an initial report as set forth in Section 3.2 below. In determining the appropriateness of land subdivision at any site containing a flood-prone area, the Planning Commission shall consider the following for any plat:
 - (1) The danger to life and property due to the increased flood heights or velocities, either potential or actual, caused by subdivision fill, roads, and intended uses.
 - (2) The danger that intended uses or improvements may be swept onto other lands or downstream to the injury of others.
 - (3) The adequacy of proposed water supply, sanitation, and drainage systems, and the ability of these systems to function under flood conditions.
 - (4) The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage upon the individual owner.
 - (5) The importance of the services provided by the proposed facility to the community at large.
 - (6) The requirements of the subdivision for a waterfront location.
 - (7) The availability of alternative locations not subject to flooding for the proposed subdivision and land uses.
 - (8) The compatibility of the proposed uses with existing development or development anticipated in the foreseeable future.
 - (9) The relationship of the proposed subdivision to the land development plan and the flood-plain management program for the area.
 - (10) The safety of access to the property for emergency vehicles in times of flood.
 - (11) The expected heights, duration, velocity, rate of rise, and sediment transport of the flood waters expected at the site.
 - (12) The costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems, public ways, and bridges.

(13) The effect of the proposed subdivision upon the City's participation in the National Flood Insurance Program.

No subdivision or part thereof shall be approved by the Planning Commission if proposed levees, fills, structures, or other features within the subdivision will individually or collectively, increase flood flows, heights, duration, or damages. The regulatory limits (the one hundred (100)-year flood level) shall be determined from the latest approved flood study for the jurisdictional area and any subsequent revisions thereto.

In any instance in which the Planning Commission determines that a proposed subdivision may affect the flood height, velocity, or duration in any flood-prone area outside its jurisdiction, the Planning Commission will require the applicant to coordinate review of the development plans with the appropriate governmental agencies of the affected areas.

In approving plats for subdivision of land containing flood-prone areas, the Planning Commission will require that development proceed in such a way that property lying within any floodway, as defined by these regulations, will be maintained in a manner as prescribed by the zoning ordinance. The Planning Commission will require the developer to make all reasonable efforts so that development within any floodway fringe area (within the one hundred (100)-year flood level) is protected adequately against potential flood hazards by the methods prescribed in Section Four of these regulations.

The Planning Commission will disapprove the subdivision of any land containing a flood-prone area when the Planning Commission determines that subdivision plats are not consistent with the policy stated in this section. The Planning Commission shall also require compliance with the National Flood Insurance Program requirements adopted by the City.

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SECTION TWO: PROCEDURES FOR PLAT APPROVAL

2.1 <u>Preliminary Meeting Required</u>

Prior to the application for subdivision approval, the property owner or his agent, shall meet with the City Manager at a pre-application conference to become familiar with these regulations, the Street Classification Plan, and other official plans or public improvements which might affect the area to be subdivided. Applicants shall provide a preliminary plat or conceptual plan of the proposed area to be subdivided for discussion at the pre-application conference. The initial review shall determine whether the application is a major subdivision action or is exempt from the preliminary plat requirements as set forth in Section 2.3 below.

2.2 Formal Consideration

These Regulations outline the minimum standards for the various documents associated with any application for subdivision approval within the City. The necessary documents shall be accompanied by an official application form submitted prior to deadlines established annually by the Planning Commission. Most subdivision actions are subject to the approval of the Planning Commission, which considers cases according to the officially adopted meeting schedule for the calendar year. The necessary forms and a calendar of meeting dates can be found on the City's web site - www.oakhilltn.us. All subdivision applications shall identify the developer and all persons having any financial interest in the proposed subdivision.

Unless it is determined that the subdivision is exempt from the preliminary plat requirements, the property owner shall prepare and submit a preliminary plat in accordance with these regulations to begin formal consideration by the Planning Commission. Depending on the complexity of the subdivision, other actions may be required including off-site improvements, utility approvals, etc.

2.3 Preliminary Plat Exemptions (Minor Subdivisions)

An applicant may be exempt from the submission requirement of a preliminary plat and require only submittal of a final plat for minor subdivisions by submitting a written request to the City Manager and provided the following conditions are met:

- (1) The proposed subdivision does not contain more than four (4) lots, sites, or divisions.
- (2) All public improvements set forth in Section Six are installed and approved by the City of Oak Hill. (Any construction, installation, or improvement of public improvements shall require the submission of a preliminary plat as prescribed by Section Three).

- (3) The applicant has consulted with the City Manager and it is agreed upon by the Planning Commission Chairman (or his/her designee) that a preliminary plat is not required.
- (4) The proposed subdivision is not within the areas of the Radnor Lake Natural Area Impact Zone or includes areas with known steep slopes as defined by the City of Oak Hill Zoning Ordinance.

SECTION THREE: PRELIMINARY PLAT

- 3.1 <u>Application Procedure and Requirements</u> The applicant shall file a preliminary plat with the Planning Commission except as otherwise provided for in Section 2.3 hereof. The failure of the applicant to satisfy the requirements of this section with full and correct information shall be cause for disapproval of a preliminary plat. The preliminary plat shall be prepared in accordance with Section Five and:
 - (1) Be presented to the City Manager at the offices of the City of Oak Hill and be accompanied by the required fee. The preliminary plat shall be placed on the agenda of the Planning Commission within thirty (30) days of the filing or the next regularly scheduled meeting of the Planning Commission after the thirty (30) day period. The applicant may waive the time frame requirement for the appearance of the plat on the agenda.
 - (2) Include all land which the applicant proposes to subdivide and all land immediately adjacent, extending one hundred (100) feet therefrom, or of that directly opposite thereto, extending one hundred (100) feet from the public way frontage of such opposite land. The lot pattern of surrounding development shall be shown within that area located within five hundred (500) feet of the proposed development.
 - (3) Be accompanied by an electronic copy in Adobe Acrobat (.pdf) format and an appropriate number of hard copies as required by the City Manager.
 - (4) Be accompanied by a completed preliminary plat checklist which can be found in Appendix C.
- 3.2 <u>Administrative Review</u> An administrative review meeting shall be conducted on the preliminary plat and any exhibits submitted in conformance with these regulations. This review shall include the City Manager and any other appropriate governmental representative. The review shall be held prior to the regularly scheduled Planning Commission meeting at which the preliminary plat is to be reviewed.

The applicant shall provide a report, prepared by a registered engineer in the State of Tennessee, on any proposed subdivision containing or abutting a flood prone area. Such report shall estimate the discharge of the regulatory flood; determine the specific flooding threat at the site of the proposed subdivision; and indicate whether the subdivision is located in a floodway or floodway fringe area by:

- (1) Calculation of water surface elevations and regulatory flood protections based upon a hydraulic analysis of the capacity of the stream channel and overbank areas to convey the regulatory flood.
- (2) Computation of the floodway required to convey the regulatory flood

- 3.3 <u>Notice of Hearing</u> The Planning Commission shall hold a hearing and provide notice of the hearing to the applicant as required by Section 13-4-304(c), <u>Tennessee Code Annotated</u>, for each plat submitted to the City.
- 3.4 Approval or Disapproval of Preliminary Plat – After the Planning Commission has reviewed the preliminary plat, any exhibits, and the results of administrative review, the applicant shall be advised of any required changes. The Planning Commission shall approve, conditionally approve, or disapprove the preliminary plat within sixty (60) days after the date of the regular meeting of the Planning Commission at which the hearing on the preliminary plat is first considered. The applicant may waive the time requirement set in this section and consent to an extension or extensions of the applicable time period. Furthermore, the time requirement set in this section may be adjusted for holidays or unexpected interceding events that close City offices as provided for in T.C.A. § 13-4-Any revised preliminary plans approved by the Planning Commission shall supersede any previously approved plans. A certificate of preliminary approval shall be issued by the City Manager upon request. The approval of the preliminary plat shall not constitute acceptance of the final plat. A final plat based upon the approved preliminary plat shall be submitted for review and approval separately and in the manner prescribed by Section Four of these regulations.

After the Planning Commission approves, conditionally approves, or disapproves the preliminary plat, one (1) copy of the proposed preliminary plat shall be returned to the applicant with the date of approval, conditional approval, or disapproval thereon. If a preliminary plat is disapproved, the Planning Commission shall state specific reasons for disapproval which shall be entered into the minutes of the meeting.

- 3.5 <u>Changes to the plat</u> If a plan is approved, or approved subject to modifications, and the applicant desires to make substantial modifications as determined by the City Manager, other than those already required by the Planning Commission, a new preliminary plan must be submitted for consideration.
- 3.6 Effective Period of Preliminary Approval The approval of a preliminary plat shall be effective for a period of two (2) years. At the end of this two (2) year time period, the applicant shall have completed the construction of the required improvements and obtained approval of the subdivision final plat from the Planning Commission. Any plat not receiving final approval within the period of time set forth herein shall be null and void, and the applicant shall be required to submit a new plat for approval subject to any zoning provisions and the subdivision regulations in effect at the time of the submittal. Not later than 60 days prior to the expiration of the preliminary plat, the applicant may request an extension of the effective period. The Planning Commission may authorize an extension of the effective period for not more than one (1) year if the Planning Commission deems such extension to be advisable based upon progress made in developing the subdivision.

3.7	Zoning Regulations – Every plat shall conform to all zoning regulations and subdivision regulations in effect at the time of the application for preliminary plat. Any plat which has received preliminary approval shall be exempt from any subsequent amendments to the zoning ordinances or these subdivision regulations rendering the plat nonconforming as to bulk, use, or development standards, provided that final plat approval is obtained within the effective period of preliminary plat approval, as extended, set forth in Section 3.6, herein.

SECTION FOUR: FINAL PLAT

- 4.1 <u>Application Procedure and Requirements</u> An applicant shall file a final plat with the Planning Commission. The failure of the applicant to satisfy the requirements of this section with full and correct information shall be cause for disapproval of a final plat. The final plat, and associated documents, shall be presented in accordance with the following:
 - (1) Include the entire subdivision, or section thereof, for which final approval is sought.
 - (2) Be accompanied by an electronic copy in Adobe Acrobat (.pdf) format and an appropriate number of hard copies as required by the City Manager.
 - (3) Comply substantially with the preliminary plat, where such plat is required.
 - (4) Be presented to the Secretary of the Planning Commission. The final plat will be placed on the agenda of the Planning Commission within thirty (30) days of the filing or the next regularly scheduled meeting of the Planning Commission after the thirty (30) day period. The applicant may waive the time frame requirement for the appearance of the plat on the agenda.
 - (5) Be accomplished by formal irrevocable offers of dedication to the public of all public streets and uses, utilities, parks, and easements, in a form approved by legal counsel, as applicable. (The subdivision plat shall be marked with a notation indicating the formal offers of dedication as shown in Appendix B of these regulations).
 - (6) Be prepared to provide adequate security, if required, in a form satisfactory to legal counsel and in compliance with Section 8 to insure the completion and maintenance of all improvements of the development.
 - (7) Be accompanied by written assurance from any public utility companies and fire department serving the area of the subdivision that necessary utilities will be installed and by proof that the applicant has submitted petitions in writing for the creation or extension of any utility districts as required by the Planning Commission upon preliminary plat approval.
 - (8) Be accompanied by the following documentation if the final plat contains common maintenance elements such as detention ponds, entry signage, drainage easements, etc. for approval by the City of Oak Hill:

Note: Only those portions of the platted site that serve as a benefit for the entire subdivision and are considered common elements shall be permitted to be under common ownership. These include, but are not limited to, streets,

public open space and recreation, drainage ways, and stormwater retention.

- (a) Plans for improvement and maintenance of the open space or facilities located thereon. (Note: This particularly applies to drainage and detention structures.)
- (b) Articles of incorporation and bylaws of the property or Homeowners Association or other legal entity charged with improving or maintaining the open space or facilities, and declaration of covenants and restrictions pertaining to each and every property within the subdivision.
- (c) Declaration of covenants and restrictions pertaining to open space and facilities which assure the continued use of said facilities for the purpose intended.
- (9) Be accompanied by certification that the construction of any required improvements have been completed in accordance with these regulations or that adequate security for such improvements have been provided in compliance with Section 8.
- (10) Be accompanied by a completed final plat checklist which can be found in Appendix D.
- 4.2 <u>Endorsement of Notations</u> The notations and certifications required by Appendix B, of these regulations to appear upon the final plat shall be endorsed by appropriate officials and other persons prior to application for final subdivision plat approval, except that the certificate of Planning Commission approval shall be signed at the time specified in Section 4.5.1 of these regulations.
- 4.3 <u>Hearing and Decision on Final Plat</u> The Planning Commission shall hold a hearing as required by Section 13-4-304, <u>Tennessee Code Annotated</u>, on each final plat brought before it. Within sixty (60) days after the Planning Commission meeting where the final plat was initially considered, the Planning Commission shall approve, conditionally approve, or disapprove the final subdivision plat by resolution, which shall set forth in detail any conditions to which the approval is subject, or reasons for disapproval.

Failure of the Planning Commission to act upon a final plat within the prescribed time shall be deemed approval of the final plat, and in such event, a certificate of approval, entitling the applicant to proceed shall be issued by the City Manager upon request. The applicant, however, may agree to an extension of the time for Planning Commission review.

The City of Oak Hill Planning Commission approval of the final plat shall expire after a period of one (1) year. If the final plat is not recorded within the one (1) year period, the applicant may request the approval be extended prior to the expiration date. Not later

than 60 days prior to the expiration of the preliminary plat, the applicant may request an extension of the effective period. The Planning Commission may extend approval for a period not to exceed one (1) year if it deems such to be advisable based upon progress made in developing the subdivision.

4.4 <u>Vested Rights</u> – No vested rights shall automatically accrue to any plat by reason of preliminary or final plat approval and the property owner shall rely upon such approval until the actual signing of the plat by the Secretary of the Planning Commission. All requirements, conditions, or regulations adopted by the Planning Commission, applicable to the particular subdivision or to all subdivisions generally, shall be deemed a condition of approval for any subdivision prior to the time of the signing of the final plat by the Secretary of the Planning Commission. Where the Planning Commission has required the installation of improvements prior to the signing of the final plat, the Planning Commission shall not unreasonably modify the conditions set forth in the resolution of final approval.

4.5 Signing and Recording of Subdivision Plat

4.5.1 Signing of Plat

- (1) When adequate security is required for completion and/or maintenance of improvements, the Secretary of the Planning Commission shall endorse approval on the plat after the security and amount for these items have been submitted and approved by the City of Oak Hill.
- (2) When installation of improvements is required, the Secretary of the Planning Commission shall endorse approval on the plat after all conditions of the resolution have been satisfied and all improvements satisfactorily completed. There shall be written evidence that the required public facilities have been installed in a manner satisfactory to the governing body as shown on certifications by the appropriate governmental representative(s) that necessary land dedications and improvements have been accomplished.
- (3) When restrictive covenants are required, a recorded copy shall be submitted for verification.
- (4) When the conditions of this section are satisfied, the Secretary of the Planning Commission shall sign the permanent reproducible original of the subdivision plat.
- 4.5.2 Recording of Plat All plat recordings will be transacted by the City of Oak Hill. The subdivision applicant shall supply the Secretary of the Planning Commission two (2) paper copies of the original plat, one (1) Mylar copy, and one (1) digital copy (Adobe Acrobat .pdf), with all signed by the correct parties for recording with the County Registers Office.

4.5.3 <u>Phasing of Subdivision Plats</u> – Prior to granting final approval of a final subdivision plat, the Planning Commission may permit the plat to be divided into two (2) or more phases and may impose such conditions upon the filing of each section as it may deem necessary to assure the orderly development of the subdivision.

The Planning Commission may require that adequate security in such amount as is commensurate with the phase or phases of the plat to be filed and may defer the remaining required performance bond principal amount until the remaining phases of the plat are offered for filing. Such authorized sections must contain at least one third (1/3) of the total number of lots contained in the proposed plat unless a specific waiver of this requirement is granted by the Planning Commission.

4.6 <u>Public Improvements</u> – The Planning Commission may require that all public improvements be installed and dedicated prior to the signing of the final subdivision plat by the Secretary of the Planning Commission. If the Planning Commission does not require that all public improvements be installed and dedicated prior to signing of the final subdivision plat, adequate security shall be required as set forth in Section 8.

Such bond amounts shall be submitted by the applicant at the time of application for final subdivision plat approval. The Planning Commission shall require the applicant to indicate on the plat all public ways and improvements to be dedicated; all districts for water, fire, and utility improvements which shall be required to be established or extended; and any other special requirements deemed necessary by the Planning Commission in order for the subdivision plat to conform to the zoning ordinance and the land development plan for the jurisdictional area.

A maintenance bond shall be required by the City of Oak Hill as referenced in Section 4.8.3.

4.7 Improvements and Performance Bond

- 4.7.1 <u>Completion of Improvements</u> Before the final subdivision plat is signed by the Secretary of the Planning Commission as specified in Section 4.5.1 of these regulations, all applicants shall complete, in accordance with the Planning Commission's decision and to the satisfaction of the appropriate governmental representative, all public street, sanitary, and other improvements, including lot improvements on the individual lots of the subdivision, as required in these regulations and as approved by the Planning Commission, and shall dedicate such improvements to the governing body free and clear of all liens and encumbrances on the property and public improvements thus dedicated.
- 4.7.2 <u>Performance Bond</u> The Planning Commission, at its discretion, may waive the requirement that the applicant complete and dedicate all public improvements

prior to the signing of the final subdivision plat by providing that, as an alternative, the applicant post a bond at the time of submission for final subdivision approval in an amount estimated by the Planning Commission as sufficient to guarantee to the governing body the satisfactory construction, installation, and dedication of the incomplete portion of required improvements.

Such performance bond shall comply with all statutory requirements and shall be satisfactory to legal counsel for the City of Oak Hill as to form, sufficiency, and manner of execution, as set forth in these regulations. The period within which required improvements must be completed shall be specified by the Planning Commission in the resolution approving the final subdivision plat and shall be incorporated in the bond and shall not exceed two (2) years from date of final approval unless a longer period is specifically authorized by the Planning Commission.

Such bond may be reviewed and modified by the Planning Commission as to amount and conditions. The Planning Commission may, upon proof of difficulty, extend the completion date set forth in such bond for a maximum period of one (1) additional year. The Planning Commission may accept at any time during the period of such bond a substitution of principal.

- 4.7.3 <u>Temporary Improvements</u> The applicant shall build and pay for all temporary improvements required by the Planning Commission and shall maintain them to a reasonable satisfaction for the period specified by the Planning Commission.
- 4.7.4 <u>Costs of Improvements</u> All required improvements shall be made at the applicant's expense. Any provisions for reimbursement by the City or any utility agency shall be stipulated clearly in the provisions of any bond.
- 4.7.5 <u>Failure to Complete Improvements</u> In subdivisions for which no security was required or posted, if the improvements are not completed within the period specified by the Planning Commission in the resolution approving the plat, the approval shall be deemed to have expired. In those cases in which security has been posted and required improvements have not been installed within the terms of such performance bond, the Planning Commission thereupon may declare the development to be in default and take additional action, including but not limited to revoking or suspending the plat, and require that all the improvements be installed regardless of the extent of the building development at the time of the default.
- 4.7.6 <u>Acceptance of Dedication Offers</u> Acceptance of formal offers of dedication of public streets, easements, and parks shall be by formal action of the Board of Commissioners. Such action shall be in the form of a resolution recommended by the Planning Commission to the Board of Commissioners. The approval by the Planning Commission of a subdivision plat shall not be deemed to constitute or

imply an acceptance by the local government of any public street, easement, or other ground shown on the plat. The Planning Commission may require the plat to be endorsed with appropriate notes to this effect.

4.8 <u>Inspection of Improvements</u>

4.8.1 General Procedure – The City of Oak Hill may require inspection of required improvements during construction and ensure their satisfactory completion. The cost of the inspections is to be borne by the applicant and will be included in the initial permitting fees. If the appropriate governmental representative finds upon inspection that any of the required improvements have not been constructed in accordance with the City's or utility agency's construction standards and specifications, the applicant shall be responsible for completing the improvements to the required standards. Whenever the cost of improvements is covered by a performance bond, the applicant and the bonding company or other financial institution shall be liable severally and jointly for completing said improvements according to specifications.

4.8.2 Release or Reduction of Performance Bond

- (1) <u>Certificate of Satisfactory Completion</u> The City of Oak Hill shall not accept dedication of required public improvements nor release nor reduce the security posted until the City Manager has confirmed that all required improvements have been satisfactorily completed, and until the applicant's engineer or surveyor has certified to the Planning Commission and the City Manager (through submission of a detailed as-built survey of the subdivision indicating location, dimensions, construction materials, and any other information required by the Planning Commission) that the layout and the line and grade of all public and private improvements are in accordance with the approved construction plans for the subdivision. Upon such approval and recommendation, the City of Oak Hill, thereafter, may accept the dedicated improvements in accordance with the procedures set forth in Section Six of these regulations.
- (2) In no event shall security posted be reduced below twenty-five percent (25%) of the principal amount prior to acceptance of all items covered under the bond.
- 4.8.3 <u>Maintenance of Improvements</u> The applicant or authorized agent shall be required to maintain all improvements including, but not limited to, all roadway, drainage systems, sod or seeded grass, headwalls, rock lining, and keep all drains open during development of a subdivision and for a period of twenty-four (24) months after completed to the satisfaction of the city.

4.9 <u>Issuance of Building Permits and Certificates of Occupancy for Individual Lots</u>

- (1) In general, no building permit for an individual lot may be issued until after the recording of the final plat.
- (2) Where a performance bond has been required, no certificate of occupancy for any building in the subdivision shall be issued prior to the completion of the improvements and the City of Oak Hill has issued the certificate of completion for the respective phase or the entire subdivision, as approved in the final plat.

SECTION FIVE: GENERAL REQUIREMENTS AND MINIMUM STANDARDS OF DESIGN

- 5.1 <u>General Requirements</u> Residential subdivisions shall be designed to create desirable neighborhoods with peace, quiet, safety, and beauty wherein residential values will be maintained and enhanced after full development. Because the diversity of land ownership makes it unlikely for one (1) owner to develop a large section of the city as a unified planned neighborhood, the Planning Commission shall make use of the policies in the latest adopted comprehensive plan as the basis for ensuring unified residential development in the City.
 - 5.1.1 <u>Conformance to Applicable Rules and Regulations</u> In addition to the requirements established herein, all subdivision plats shall comply with all applicable laws, ordinances, resolutions, rules, or regulations, including, but not limited to:
 - (1) All applicable provisions of Tennessee law, regulations, or policy;
 - (2) Any zoning ordinance, any building and housing codes, and all other applicable laws or policies of the governing body;
 - (3) The adopted general plan and street classification plan;
 - (4) The rules of the Davidson County Health Department and the Tennessee Department of Health and Environment;
 - (5) The rules, as applicable, of the Federal Highway Administration or Tennessee Department of Transportation, if the subdivision or any lot contained therein abuts a non-local highway;
 - (6) Any requirements of the Tennessee Department of Environment and Conservation, the U.S. Army Corps of Engineers and the Federal Emergency Management Agency;
 - (7) The regulations of the State of Tennessee and the Davidson County Fire Marshals with respect to street layout and fire hydrant locations (See Appendix C Item 16);
 - (8) All provisions of the American with Disabilities Act; and
 - (9) The standards and regulations adopted by all other boards, commissions, and agencies of the governing body, where applicable.

Plat approval may be withheld if a subdivision is not in conformity with the above rules.

- 5.1.2 <u>Self-Imposed Restrictions</u> If the owner places restrictions on any of the land contained in the subdivision greater than those required by the zoning ordinance or these regulations, such restrictions or reference thereto shall be required to be recorded along with the final subdivision plat in the office of the Davidson County register.
- 5.1.3 Monuments Concrete monuments four (4) inches in diameter or square and two (2) feet long with a flat top shall be set at all street corners, at all points where the street lines intersect the exterior boundaries of the subdivision and at angle points and points of curve in each street. The top of the monuments shall have an indented cross to properly identify the location and shall be set flush with the finished grade. The monuments shall also have the land surveyor's license number, who prepared the survey and set the monument, inscribed on the top.
- 5.1.4 Pins All other lot corners shall be marked with iron pins not less than three-fourths (0.75) inch in diameter and twenty-four (24) inches long and driven so as to be flush with the finished grade. The pins shall also have the land surveyor's license number, who prepared the survey and set the monument, inscribed on the top.
- 5.1.5 <u>Character of the Land</u> Land which the Planning Commission finds to be unsuitable for subdivision and development due to flooding, improper drainage, unstable soils, steep slopes, rock formations, adverse earth formations or topography, utility easements, or other features which would be harmful to the safety, health, and general welfare of inhabitants of the land and surrounding areas, shall not be subdivided or developed unless adequate methods are formulated by the applicant and approved by the Planning Commission to address the unsuitable land conditions.
- 5.1.6 <u>Subdivision Name</u> The proposed name of the subdivision shall not duplicate or too closely approximate phonetically the name of any other subdivision in the Metropolitan Nashville area. Metro Public Works Department must sign off on this name approval. The Planning Commission shall have authority to approve the name of the subdivision during preliminary plat approval.
- 5.1.7 Water Quality Permitting The applicant or authorized agent shall acquire all applicable permits from State and Federal Agencies including but not limited to U.S. Army Corp of Engineers Section 404 permit and the Tennessee Department of Environment and Conservation "Aquatic Resource Alteration Permit" (ARAP) any time that a stream or wetland is impacted by development. Road crossings, stream relocations, bank stabilization, or utility line crossings, etc. will require permitting. The applicant or authorized agent shall obtain a National Pollutant Discharge Elimination System Permit (NPDES) as required by law.

5.2 Lot Requirements

5.2.1 <u>Lot Arrangement</u> – The lot arrangement shall be such that there will be no foreseeable difficulties, for reasons of topography, flood hazards, or other conditions in securing building permits to build on all lots in compliance with the Zoning Ordinance and State and County Public Health Department regulations and in providing driveway access to buildings on such lots from an approved public and / or private street.

Where a lot in any flood-prone area must be improved to provide a building site free from flooding, such improvements shall be made outside the floodway by elevation or fill to at least three (3) feet above the regulatory flood protection elevation (one hundred (100)-year flood) for a distance extending at least twenty-five (25) feet beyond the limits of intended structures and, additionally, extending a sufficient distance to include areas for subsurface sewage disposal if the lot is not to be connected to a public sanitary sewer system. Any fill shall be protected against erosion by rip-rap, vegetative cover, or other methods deemed acceptable by the Planning Commission.

5.2.2 <u>Lot Dimensions</u> – Lot dimensions shall comply with the minimum standards of the zoning ordinance where applicable. Generally, side lot lines shall be at right angles or radial to street lines.

Dimensions of the corner lots shall be large enough to allow for erection of buildings, observing the minimum front yard setback requirements from both public rights-of-way.

Building setbacks shall conform to the minimum standards of the zoning ordinance.

- 5.2.3 <u>Double Frontage Lots</u> Double frontage and reverse frontage lots should be avoided, except where they are needed to provide for the separation of development from traffic arteries or to overcome specific disadvantages of topography and orientation. A planting screen easement at least twenty (20) feet wide shall be provided along the portion of the lots abutting an arterial or collector roadway, as designated on the City's Street Classification Plan or other use where screening is required. There shall be no right-of-access across a planting screen easement.
- 5.2.4 Soil Preservation and Final Grading No certificate of completion shall be issued until final grading has been completed in accordance with the approved construction plan and the lot pre-covered with soil having an average depth of at least six (6) inches and containing no particles over two (2) inches in diameter over the entire area of the lot, except that portion covered by buildings or included in streets or where the grade has not been changed or natural vegetation seriously

damaged.

Topsoil shall not be removed from residential lots or used as spoil, but shall be redistributed so as to provide at least six (6) inches of cover on the lots and at least four (4) inches of cover between any sidewalks and curbs and be stabilized by seeding or planting.

- 5.2.5 <u>Lot Drainage</u> Lots shall be laid out so as to provide positive drainage away from all buildings, and individual lot drainage shall be coordinated with the general storm drainage pattern for the area which includes subsurface drainage. Drainage shall be designed so as to avoid concentration of storm drainage water from each lot to adjacent lots.
- 5.2.6 <u>Erosion and Sediment Control</u> There shall be minimal changes in the rate of natural erosion and sedimentation which result from the development process. An erosion and sediment control plan shall be presented with the construction plans submitted in conformance with these regulations. Such plans shall incorporate the following principals:
 - (1) clearing and grading shall be integrated with layout design;
 - (2) clearing shall be minimized and existing vegetation shall be preserved to the maximum feasible degree;
 - (3) grading shall be strictly limited to those areas involved in current construction activities;
 - (4) disturbed areas shall be protected and stabilized as soon as possible;
 - (5) all necessary measures shall be taken to control erosion onto adjacent properties and into adjacent streams or bodies of water throughout the construction period or until disturbed areas are stabilized with vegetation;
 - (6) temporary measures shall include silt fence, temporary construction entrance, rock check dams, inlet protection, temporary sediment basins and traps, etc.;
 - (7) subsurface drainage systems, including pipe inlets and catch basins, shall be protected from erosion and siltation by approved inlet protection measures, or other approved methods until the surrounding area has been stabilized with vegetation;
 - (8) adequate maintenance and inspection of erosion/siltation control structures is required to ensure proper working order. Inspections should be made based on Tennessee Department of Environment and Conservation (TDEC)

requirements. Control structures shall be replaced and maintained as necessary; and

- (9) adjacent City of Oak Hill streets and drainage ways must be kept clean and clear by the applicant during construction.
- 5.2.7 <u>Debris and Waste</u> No cut trees, timber debris, junk, rubbish, or other waste materials of any kind shall be buried in any land or left or deposited on any lot or public street or private street at the time of the issuance of a certificate of completion for the lot, and removal of such waste shall be required prior to issuance of any certificate of occupancy. Neither shall any such waste be left nor deposited in any area of the subdivision at the time of expiration of the performance bond or dedication of public improvements, whichever is sooner.
- 5.2.8 <u>Burning</u> No burning of debris or waste shall be allowed within the corporate limits of the City of Oak Hill.
- 5.2.9 <u>Blasting</u> It is the City of Oak Hill's policy to discourage blasting within its corporate limits when alternative methods are available.
- 5.2.10 <u>Fencing</u> Each applicant shall be required to furnish and install all fences wherever a hazardous condition may exist. Such fences shall be constructed according to standards established by the City of Oak Hill, as appropriate, and shall be noted on the final plat as to height and required materials. No certificate of occupancy shall be issued for any affected lot until such fence improvements have been installed.

5.3 Street Requirements

- 5.3.1 <u>Conformity to the Street Classification Plan</u> The location and width of all streets and roads shall conform to the official Street Classification Plan.
- 5.3.2 <u>Relation to Adjoining Street System</u> The proposed street system shall extend existing streets or projects. They shall be extended at a width no less than the required minimum width.
- 5.3.3 <u>Street Right-of-Way Widths</u> The minimum width of right-of-way, measured from lot line to lot line shall be not less than as follows:
 - (1) Arterial Streets and Highways: Minimum right-of-way width of ninety (90) feet

The Planning Commission may require additional right-of-way to accommodate additional laneage, on-street parking, bikeways and medians.

Arterial streets are the primary streets for moving large numbers of vehicles quickly through the City and are identified in the Street Classification Plan.

(2) Collector Streets: Minimum right-of-way width of sixty (60) feet

Collector streets are designed to carry traffic from minor streets to the arterial streets and typically include the principal entrance streets of a residential development.

(3) Local Streets: Minimum right-of-way width of fifty (50) feet

Local streets are those that are used primarily for access to the abutting residential properties and designed to discourage their use by through traffic.

(4) Dead-end streets (cul-de-sacs) for residential areas: Minimum right-of-way width five (5) feet wider than the paved surface and no less than fifty (50) feet radius at end of the street. Cul-de-sacs may be omitted for short streets less than 150 feet long, measured from the radius return of the nearest intersecting street to the end of the cul-de-sac farthest from the nearest intersecting street. Requirement of a cul-de-sac and its design and must be approved by the Planning Commission and Metro Nashville Fire Marshal's office.

Cul-de-sacs are permanent dead-end streets or courts designed so that they cannot be extended in the future.

5.3.4 <u>Additional Width on Existing Streets</u> – Subdivisions that adjoin existing streets shall dedicate additional right-of-way to comply with the minimum requirements for the street under the Street Classification Plan.

When the subdivision is located on only one (1) side of an existing street, one-half (1/2) of the required right-of-way, measured from the centerline of the existing roadway or the centerline of the proposed future road alignment shall be provided, whichever is greater.

- 5.3.5 <u>Crowns</u> All pavement surfaces shall drain adequately. If the pavement surface is not super elevated, the crown shall be a minimum two percent (2%) cross slope measured from the roadway centerline to the edge of pavement.
- 5.3.6 <u>Grades</u> Grades on arterial streets shall not exceed seven percent (7%). Grades on collector streets shall not exceed nine percent (9%), grades on local streets may not exceed twelve percent (12%), unless design modification is granted by the Planning Commission, but shall not exceed fifteen percent (15%) for more than two-hundred (200) feet in length and must be approved by the Metro Nashville Fire Marshal's office.

For proper drainage, the minimum grade on any street shall be one percent (1%). Consistent with the intent and spirit of this section design modifications may be allowed for environmental considerations including but not limited to tree protection and minimization of site disturbance provided that in the opinion of the City Engineer, such grade does not pose a safety problem for the public.

5.3.7 <u>Horizontal and Vertical Curves</u> – Horizontal and vertical curves shall comply with the design standards set for in the American Association of State Highway Transportation Officials' Policy for the Geometric Design of Highway Systems, latest edition. Local and dead end streets shall meet a calculated thirty-five mile per hour (35 mph) minimum design speed. Design modifications to lower the design speed may be allowed if conditions warrant. If this is allowed, it will be required of the applicant to have the reduced design speeds posted on the streets.

Vertical curves shall be designated with the following K-values, for a thirty-five mile per hour (35 mph) design speed, crest vertical curve K-value of forty (40); sag vertical curve, K-value of fifty (50). The City may allow adjustments to lower K-values when justified for environmental considerations including but not limited to tree protection and minimization of site disturbance provided that in the opinion of the City Engineer, such grade and curve does not pose a safety problem for the public.

5.3.8 <u>Intersections</u> – All streets shall intersect as closely as possible to a ninety (90) degree angle. The minimum tangent length at the intersecting street shall be fifty (50) feet for local streets and one hundred and fifty (150) feet for arterial, collector, and commercial/service institutional streets. Property line radii at street intersections shall not be less than twenty-five (25) feet.

The subdivision applicant shall ensure sufficient sight distance as per the current AASHTO requirements.

- 5.3.9 <u>Tangents</u> A tangent of at least one hundred (100) feet in length shall be introduced between reverse curves on arterial and collector streets.
- 5.3.10 <u>Street Jogs</u> Street Jogs with center line offsets of less than one-hundred twenty-five (125) feet shall not be allowed.
- 5.3.11 <u>Cul-de-sac and Temporary Dead-end Streets</u> Minor terminal streets or courts designed to have one (1) end permanently closed (cul-de-sac) shall be no more than seven hundred and fifty (750) feet long unless necessitated by topography and approved by the Planning Commission. Street length shall be measured from the radius return of the nearest intersecting street to the end of the cul-de-sac farthest from the nearest intersecting street.

- (1) Where, in the opinion of the Planning Commission, it is desirable to provide for future street access to adjoining property, such temporary deadend streets shall be extended by dedication of right-of-way and construction of the roadway to the boundary of the adjoining property. Such dead-end streets shall be provided with a temporary turnaround having a roadway diameter of at least one hundred (100) feet and shall be bonded with the overall improvements of the subdivision.
- (2) When a road is approved as a temporary dead-end, eventual connection or road extension to or through an adjoining tract of land as indicated by the Planning Commission, then a sign shall be erected and maintained by the Subdivision Homeowners Association stating Temporary Dead-End Road, Subject to Extension at some future date.
- 5.3.12 Street Names The naming of the streets within a proposed subdivision shall be the responsibility of the applicant. All proposed street names must be approved by the Metropolitan Government of Nashville and Davidson County Department of Public Works, Fire Department, and the U.S. Postal Service before submittal to the Planning Commission. Following staff review and recommendation, the Planning Commission shall have final authority to approve or disapprove the names of all streets appearing on the plat.
 - (1) Proposed streets which are obviously in alignment with other streets already existing and named, or which may eventually connect shall bear the names of those existing streets.
 - (2) In no case shall the name for proposed streets duplicate existing street names as determined by the governing agencies noted in this section.
 - (3) Street names and types shall be carried, without change across intersections.
 - (4) The application for the street addresses shall be made through the U.S. Postal Service and confirmed by the City of Oak Hill and Metro Nashville Department of Public Works. Street addresses will also be provided on the final plat.

5.3.13 <u>Blocks</u>

- (1) Blocks shall have sufficient width to provide for two (2) tiers of lots of appropriate depth but should not be less than two-hundred and twenty (220) feet wide. Exceptions to this prescribed block width may be permitted in blocks adjacent to major public streets, railroads, or waterways.
- (2) The lengths, widths, and shapes of blocks shall be determined with due

regard for the following:

- (a) Provision of adequate building sites suitable to the special needs of the type of use contemplated;
- (b) Zoning requirements as to lot sizes and dimensions;
- (c) Needs for convenient access, circulation, control, and safety of vehicular and pedestrian traffic;
- (d) Limitations and opportunities of topography.
- (3) Block lengths in residential areas shall not exceed sixteen hundred (1,600) feet nor be less than four-hundred (400) feet, except as the Planning Commission deems necessary to secure efficient use of land or desired features of the public way pattern.

5.4 <u>Private Street Requirements</u>

- 5.4.1 General Requirements Private streets will be allowed at the sole discretion of the Oak Hill Planning Commission.
 - (1) Each preliminary plat, final plat, or revised final plat for a private street and gated subdivision as provided for in this article shall require the approval of the Planning Commission. All private streets within a subdivision shall be identified on the final plat as access easements for the benefit of all lots in the subdivisions. All property within the access easements shall be owned and maintained by the property owners association. Property encumbered by these access easements shall not be counted toward the individual lot acreage requirements as set forth in the current Oak Hill Zoning Ordinance.
 - (2) All public utility and drainage easements within a private street subdivision shall be formally dedicated on the final plat at locations and widths acceptable to the City of Oak Hill, Metro Water Services and other affected utilities. The plat shall provide for access to employees of the city and all utilities providing service to the subdivision, when acting in the course of their employment, to enter such easements and all vehicle access easements; and to maintain all public utilities and facilities lying therein.
 - (3) A private street shall not cross any existing collector or arterial street designated on the City's most recent Street Classification plan or prevent the construction of such future streets as identified in the plan. No private street shall be permitted in a location that would prevent vehicle access to future subdivision on tracts adjacent to the site if such tracts, in the determination of the Planning Commission, lack sufficient alternative access. In addition, a private street shall not disrupt or prevent the reasonable establishment of public pedestrian connections between adjacent subdivisions, public streets, churches and public parks.

(4) No school, park, church, or other public facility shall be located within a private street subdivision unless it is fully accessible to the general public from a public right-of-way and conforms to all Conditional Use permitting and the City of Oak Hill Zoning Ordinance requirements.

5.4.2 <u>Technical Requirements</u>

(1) Design, construction, and inspections of all streets, curbing, drainage, street lighting, utilities, and traffic control devices in a private street subdivision shall conform to the same technical requirements for the public streets of these regulations.

All street and other improvements shall be completed and certified to be in compliance with the approved plan before approval of the final plat by the Planning Commission. For any final plat approved prior to the completion of streets and other improvements, the Planning Commission shall require a performance bond to be posted in an amount sufficient to assure completion of the work. The performance bond shall not be reduced or released until all improvements have been deemed to be in compliance with the above technical standards and have been released to the property owners' association for maintenance responsibility.

- (2) No gates or guardhouses for a private street subdivision shall be placed on public right-of-way. All gates and guardhouses shall subject to the requirements and obtain the necessary approvals as required by ordinance.
- (3) Additional Requirements The Planning Commission may impose such additional requirements for private streets as may be necessary to carry out the intent of these subdivision regulations.

SECTION SIX: DEVELOPMENT REQUIREMENTS FOR CERTIFICATE OF COMPLETION

- 6.1 <u>General</u> The proper installation of public improvements allows the community to avoid a potential tax liability to correct substandard improvements in a subdivision. The following tangible improvements or bond provisions based upon the estimated costs are required before final plat approval and recording referenced in Section Four. This is to assure the implementation of a subdivision based upon the requirements legally established by the approval and recordation.
- 6.2 <u>Required Improvements</u> Every subdivision applicant shall be required to grade and improve streets and to install paving, curbs, gutters, monuments, street lighting, signage and pavement markings, sewers, storm water systems, water mains and fire hydrants in accordance with specifications within these regulations and as established by the Planning Commission. Where specifications adopted by local authorities or agencies conflict with regulations set forth herein, the more stringent shall govern.

6.2.1 <u>Street Specifications – Grading, Site Work, and Pavement Construction</u>

<u>Purpose</u> – In the interest of improving the quality of public street construction and decreasing future maintenance requirements, the City shall require the following specifications in the design and construction of public streets.

6.2.2 <u>Scope</u> – These specifications include minimum criteria for the design and construction of public streets and authorized private streets within the City.

6.2.3 General

- (1) Engineer: The term Engineer as hereinafter used will refer to the City's authorized engineering representative.
- (2) Developer/Contractor Responsibilities: No design requirement or testing and monitoring as outlined herein shall relieve the Developer/Contractor from his responsibility to provide a stable street in compliance with the specifications.
- (3) Items Not Specifically Covered: Construction of items not specifically covered herein shall conform to the Tennessee Department of Transportation Standard Specifications for Road and Bridge Construction, latest edition.

6.2.4 Design Requirements

(1) Definitions: Pavement refers to all components of the street section above the sub-grade. Pavement includes the mineral aggregate base, bituminous plant mix base course, if any, and the asphaltic concrete wearing surface.

- (2) Sub-grade: Sub-grade refers to the top section of the prepared roadbed upon which the pavement section is placed.
- (3) Minimum Pavement Section Design:

Thickness of Mineral Aggregate Base: eight (8) inches in two to four (2-4) inch lifts

Bituminous Plant Mix Base (Binder): two and one half (2.5) inches

Thickness of Asphaltic Concrete Wearing Surface: one and one half (1.5) inches

(Note: All depths are compacted measurements.)

The Asphalt wearing (surface) course shall not be placed for a minimum of one (1) year or until such time as seventy-five percent (75%) of the anticipated building construction has been completed upon application and approval of the City.

- (4) Alternate pavement sections will be considered if supporting computations and engineering design data are submitted. Supporting data shall include information regarding the engineering characteristics of the soil, such as moisture-density relationship, Atterberg limits, California Bearing Ratio, grain size analysis, etc. Thickness designs shall be prepared by a registered professional engineer in the State of Tennessee experienced in designing pavements based on geotechnical engineering data.
- (5) Geologic Hazards: Any areas which present geologic hazards, such as roads to be constructed on steep slopes, must be investigated by a qualified geotechnical engineer, experienced in designing the type of project in question.
- 6.2.5 <u>Clearing and Grubbing</u> All vegetation, topsoil and deleterious or unstable materials must be removed from the street construction areas. All roots, larger than one-half (1/2) inch in diameter, must also be grubbed out and removed.
- 6.2.6 Proof rolling Immediately before beginning fill placement in areas to be filled, once fill has been placed and immediately before applying the aggregate base in cut areas, the sub-grade must be proof rolled using a heavily loaded pneumatic-tired vehicle such as a loaded dump truck. This proof rolling must be observed by the City Engineer, or its designee, and any soft or unstable areas delineated thereby, must be undercut to stable ground and backfilled with approved fill. The area must be proof rolled again until a satisfactory result is achieved determined by the City.
- 6.2.7 <u>Fills</u> Fill must consist of soil, rock, or an approved soil/rock mixture free from roots, wood, organic matter, rubble and any other deleterious material. Fills shall

be constructed to provide positive drainage during all phases of construction.

(1) Soil fill must be free of rock fragments over six inches (6") in maximum dimensions and must have a minimum dry density when compacted of ninety-five (95) pounds per cubic foot.

Soil fills must be placed in ten (10) inch lifts maximum, and compacted to at least ninety-five percent (95%) of its maximum dry density as determined by ASTM D-698 (Standard Proctor). Soil fill must be stable after compaction, regardless of compaction percentage. Adequate compaction will be verified by institution density tests performed by the City's designated inspector. (See 6.2.6)

(2) Rock fill shall consist of durable, clean, well-graded shot rock or crushed stone. The maximum dimension of rock fragments used in the rock fill shall be eighteen (18) inches.

Rock fills shall be placed in lifts not to exceed thirty (30) inches and shall be compacted with heavy steel-wheeled or tracked vehicles. Adequate compaction will be judged in the field by City Engineer or its designee based on stability of the fill in place.

(3) An approved soil-rock mixture shall consist of soil interspersed in a well-graded mixture of rock fragments no larger than twelve (12) inches in maximum dimension. The soil-rock mixture shall be placed in lifts not exceeding twelve (12) inches in maximum thickness and compacted with tamping rollers until the soil portion of the mass is compacted to at least ninety-five percent (95%) of its maximum dry density as determined by ASTM D-698. The soil portion of the mass shall be within +/- two percent (2%) of its optimum moisture content during placement. Compaction will be verified by in-place density tests where possible, but if excessive rock fragments prevent density tests, adequate compaction will be judged by the City Engineer or its designee based on the stability of the mass under the influence of heavy construction equipment. (See 6.2.6)

The contractor shall furnish samples suitable for determining moisture density relationship of all soil types to be used in fills. These samples shall be furnished at least one (1) week in advance of their use on the project. The contractor shall contact the City to allow inspection of the sampling procedures if he so desires.

6.2.8 <u>Excavations</u> – If excavations are left exposed to the weather for extended periods of time after they are brought to grade, and/or if deterioration of the sub-grade has occurred by either wetting or drying, appropriate corrective actions must be taken. Corrective action shall consist of scarifying and re-compacting the sub-grade or

by use of other measures as deemed appropriate by the City.

6.2.9 Mineral Aggregate Base Course – The sub-grade must be prepared stable and level and be approved by the City, or its designee, shortly before placement of the base course begins. The mineral aggregate base shall consist of hard, durable crushed limestone. The gradation for mineral aggregate base shall be: Class A aggregate, Grading D, as specified by Section 903.05 of the Tennessee Department of Transportation Standard Specifications for Road and Bridge Construction, latest edition. The mineral aggregate base shall be spread by a mechanical spreader, or other approved method, which will prevent segregation. The mineral aggregate shall be spread in lifts no greater than four (4) inches in thickness and compacted to a minimum density of ninety-five percent (95%) ASTM D-968 Standard Proctor of the solid volume of the material.

Any damage to the base course during construction, including raveling, loss of density, or loss of material due to construction traffic shall be repaired by replacing and re-compacting the base.

6.2.10 Prime Coat – A bituminous prime coat shall be applied uniformly on the surface of the base at a minimum rate of 0.3 - 0.35 gallons per square yard. The prime coat shall conform to Section 904-03 of Tennessee Department of Transportation (TDOT) Standard Specification for Road & Bridge Construction. Aggregate for cover material must be placed uniformly onto the freshly applied prime coat at a rate of eight to twelve (8 - 12) lbs per square yard by a mechanical spreader. The cover material must conform to Section 903-13 of the TDOT Standard Specifications for Road and Bridge Construction.

6.2.11 Asphaltic Concrete Hot Mix

- (1) Bituminous Plant Mix Base (Binder): The bituminous plant mix base shall comply with Section 903.06 of the Tennessee Department of Transportation Standard Specifications for Road and Bridge Construction for B modified mix.
- (2) Tack Coat: The bituminous Tack Coat shall be applied uniformly on the power cleaned surface at a rate of 0.02 0.03 gallons per square yard. The Tack Coat shall be Grade AE-3 or SS-1.
- (3) Surface Course: The pavement surface course shall consist of asphaltic concrete surface (Hot Mix) Grading "E" in compliance with Section 411 of Tennessee Department of Transportation Standard Specifications.
- (4) Equipment: The contractor shall provide all necessary equipment for the proper installation of the asphalt surface treatments as outlined in the Tennessee Department of Transportation Standard Specifications Section

411.04, Equipment.

- (5) Guarantee: The Developer/Contractor shall warrant the performance of the roadway for a period of not less than one (1) year from its formal acceptance by the City. Any pavement sections exhibiting distress during the guarantee period shall be replaced with asphalt hot mix for the full width and depth of the original pavement section. The driving surface must be smooth and comply with the Tennessee Department of Transportation Ridability Special Provision.
- (6) Construction Traffic: As much as is practicable, roadways shall not be paved until heavy construction traffic thereon can be minimized.

6.3 Other Required Improvements

- 6.3.1 Minimum Pavement Widths Minimum pavement widths shall be as follows:
 - (1) Local Residential Streets: Eleven (11) feet minimum lane with two (2) feet shoulders or twelve (12) feet minimum lane with curb or curb and gutter. Lane widths measurements shall not include curb or gutter dimensions.
 - (2) Dead-end Streets (cul-de-sacs): Fifty (50) feet radius minimum
 - (3) Collector Streets: Twelve (12) feet minimum lanes with four (4) feet shoulders or twelve (12) feet minimum lane with curb or curb and gutter. Lane widths measurements shall not include curb or gutter dimensions.
 - (4) Arterial Streets: widths to vary based upon the traffic volume and land use.
- 6.3.2 <u>Curbs</u> (optional) The applicant shall provide a minimum of twenty-four (24) feet of pavement if wishing to use either mountable curb or curb and gutter on roadways. Alternative designs may be considered by the Planning Commission at the preliminary approval.
- 6.3.3 <u>Sidewalks</u> (optional) Sidewalks shall be ADA compliant. Please reference Metropolitan Government of Nashville and Davidson County minimum standards.
- 6.3.4 <u>Storm Drainage</u> Storm drainage shall be designed in accordance with the requirements set forth in the Metropolitan Government of Nashville and Davidson County Stormwater Management Manual. In the event that the City of Oak Hill adopts a stormwater manual, the City's manual shall supersede the Metropolitan Government of Nashville and Davidson County Stormwater Management Manual. To the extent possible, construction and installation of drainage

structures and facilities will be scheduled as soon as possible in the construction phase.

All submittals shall include drainage calculations and detailed hydraulic analysis of detention ponds. Detention ponds shall be utilized as temporary sediment basins where possible during construction. An engineer's certification confirming approved design volume is to be provided to the City Manager or its designee prior to issuing certificate of completion.

- 6.3.5 <u>Erosion and Sedimentation Control</u> Erosion and sedimentation control plans shall meet the following guidelines:
 - (1) Topography: The development plan should be fitted to the topography and the soils in order to minimize erosion potential.
 - (2) Development Coordination: Erosion and sedimentation control measures shall be coordinated with the required steps in construction and appropriate control measures installed prior to the start of construction.
 - (3) Sequential Control Measures: Land shall be developed in increments of workable size on which adequate controls of erosion and sedimentation can be provided and maintained during the construction period. Operations shall be staged so that the area exposed for a long period of time without stabilization, as so that the initially disturbed areas are completely controlled before the next section is opened. The developer shall be required to schedule sequentially phased controls or erosion and sedimentation as coordinated with the development and construction stages and shall specify in detail precisely which areas will be cleared first, and how long these areas will be exposed to the elements. The maximum exposure period shall not exceed one hundred twenty (120) days.
 - (4) Runoff Controls: Provisions shall be made to accommodate the increased runoff caused by changed soil and surface conditions during the ensuing development. Runoff must be intercepted and safely conveyed to storm drains or natural outlets where it will not erode or flood land. The drainage system for the development shall be completed and made operational as quickly as possible during construction.
 - (5) Cover: Wherever feasible, natural vegetation shall be retained and protected. Temporary vegetation and/or mulching shall be used where necessary to protect exposed areas during development.
 - (6) Sediment Basins (Debris Basins, Desilting Basins, or Silt Traps): Sediment basins shall be installed and maintained to collect sediment from runoff waters from land undergoing development. Storm sewer inlets with

debris guards and micro silt basins shall be provided to trap sediment and avoid possible damage by blockage.

- (7) Final Vegetation and Structures: The permanent vegetation and structures shall be installed as soon as practical in the development.
- (8) Paved Areas: Streets, parking areas, and other areas shall be paved as quickly as possible.
- 6.3.6 <u>Installation of Utilities</u> After grading is completed and approved and before any base is applied, all underground utility work, water mains, sewer mains, gas mains, electric lines, street lighting conduit, cable television, telephone, etc., and all service connections shall be installed completely and approved throughout the length of the road and across the flat section. All utilities shall be installed outside of the right-of-way, within dedicated private easements, unless otherwise impractical to do so and approved by the Planning Commission.
- 6.3.7 <u>Water Supply System</u> Trunk lines properly connected with the public water supply system or with an alternate supply approved by the Board of Commissioners and the Tennessee Department of Environment and Conservation shall be constructed in such a manner as to serve adequately, for both domestic use and fire protection, all lots shown on the subdivision plat.
 - (1) Proof of approval from the utility providing water service shall be provided to the City prior to signing of the final plat.
 - (2) An adequately sized system of water mains with sufficient flow for fire protection shall be provided as part of the subdivision. Unless alternative provisions are made for fire protection that is approved by the Fire Marshal or his designee, the minimum acceptable fire flow shall be five hundred (500) gallons per minute. Fire hydrants shall be placed in locations acceptable to the Fire Marshal or his designee to ensure that adequate fire protection to all buildings can be provided and to ensure that they will be accessible, protected from traffic hazards, and will not obstruct walks, roadways, or parking facilities. Fire hydrants shall be placed no greater than five hundred (500) feet from the center of any lot's building envelope.
 - (3) For each new platted lot in a subdivision, connections to the water system shall be installed so that future connections will not require digging up or tunneling under streets or interruption to service to other connections on the systems.

6.3.8 Sanitary Sewer and Septic Tanks

(1) Where the Planning Commission determines that a subdivision does not

have to connect to an existing public water supply or sewage system, such lots shall not be granted preliminary plat approval until approval for alternative systems is granted in writing by the County Health Officer, or an authorized representative.

- (2) Sanitary sewer shall be approved and constructed as per the requirements of the providing utility and the City.
- 6.3.9 <u>Traffic Control, Street Markers and Warning Signage</u> All street signs shall conform to the requirements of the Manual for Uniform Traffic Control Devices, latest edition. Temporary signs may be installed and maintained in lieu of permanent signs until curbs are constructed and backfilled. Temporary signs must meet the same requirements for mounting height, size, and legibility as permanent signs but may be mounted on temporary structures. The installation of temporary signs in accordance with these standards must be approved by the City Manager or his designee before authorization for building permits can be granted.

6.3.10 Street Name Signs

- (1) Installation Requirements: The developer shall purchase and install appropriate signs as designated by the City Manager. Written confirmation of this placement shall be required from the City prior to the issuance of a building permit.
- (2) Bond: Street and decorative signs and their installation will be included in the original performance bond.

Street name signs of approved type shall be installed at each subdivision intersection by the developer. Regulatory signs (intersection, speed limit, stop, yield and street markers) shall be installed prior to the issuance of any Use and Occupancy Certificate. All signs shall be approved by the City Manager or his designee for type, material, and location prior to installation.

Any decorative street name signs or regulatory signs that are installed in a subdivision are the responsibility of the Homeowners Association and not the City. All decorative signs must comply with the requirements in the Manual for Uniform Traffic Control Devices. Approval of decorative signage must be received from the City.

6.3.11 Driveways

(1) All driveways shall be constructed so as not to impair drainage within the road right-of-way, not to allow runoff from the public street onto the private driveway, not to alter the stability of the roadway subgrade, and not to impair or materially alter drainage of the adjacent areas. Minimum pipe diameter

- shall be fifteen (15) inches unless otherwise designated by the City. Headwalls shall be required on both sides of the driveway.
- (2) Residential driveway cuts shall not exceed twenty (20) linear feet in width while the width for institutional sites may vary depending on location and use. All curb cuts must have the prior approval from the City.
- (3) Approval from the Tennessee Department of Transportation must be obtained for driveway access to any state route. All applicable rules of these regulations must also be followed.
- (4) Where sidewalks are located along the roadway, the driveway access must meet the Standards of the Americans with Disabilities Act (ADA) and should conform to the Metro Davidson County Department of Public Works requirements.
- 6.4 <u>Construction Approval</u> As referenced in Sections 6.1 through 6.3, the applicant shall provide certifications from the agencies and authorities for the respective improvements, including but not limited to, the City Manager, or designee, the Tennessee Department of Transportation, the Davidson County Health Department, the Metropolitan Government of Nashville and Davidson County Fire Department, and the utility providers (water, wastewater, electric, cable, gas, etc.) prior to application for final plat approval.

SECTION SEVEN: LEGAL STATUS

- 7.1 <u>Authority</u> The enforcement of these regulations and penalties for the unapproved recordation or transfers of land are provided by State Law in the authority granted by public acts of the State of Tennessee.
- 7.2 <u>Enforcement</u> The enforcement of these regulations and penalties for the unapproved recordation or transfers of land are provided by state law in the authority granted by public acts of the State of Tennessee.

7.3 Penalties

- 7.3.1 No County register 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, <u>Tennessee Code Annotated</u>, and any County register so doing shall be deemed guilty of a misdemeanor, punishable as other misdemeanors as provided by law.
- 7.3.2 Section 13-4-306 Tennessee Code Annotated, provides that whoever being the owner or agent of the owner of any land, transfers or sell 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 to the Planning Commission and obtained its approval as required before 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 documents used in the process of selling or transferring shall not exempt the transaction from such penalties. The City, through its City Attorney or other official designated by the Board of Commissioners, may enjoin such transfer or sale or agreement by action or injunction.

7.4 Adoption and Effective Date

- 7.4.1 Before adoption of these subdivision regulations, a public hearing as required by Section 13-4-303, <u>Tennessee Code Annotated</u>, was held on, August 23, 2011 at the City Hall of Oak Hill, Tennessee.
- 7.4.2 These rules and regulations shall be in full force and effect from and after their adoption and effective date.

SECTION EIGHT: SECURITY FOR COMPLETION AND MAINTENANCE OF IMPROVEMENTS

8.1 <u>Guarantee in Lieu of Completed Improvements</u>

Before a final subdivision plat may be recorded, all improvements shall be constructed in a satisfactory manner, and approved by the City in accordance with the requirements of these Regulations. The applicant shall post a security in an amount equal to one hundred twenty percent (120%) of the estimated cost of the remaining required improvements, based upon the amount of work completed and stipulated by City staff as sufficient to secure the satisfactory construction, installation, and dedication of the required remaining improvements. Security provided in accordance with this section shall be sufficient to provide for the completion of all improvements. The following requirements shall apply to any security posted with the City pursuant to this article:

- 8.1.1 <u>General.</u> Before a final plat of a subdivision which requires improvements can be recorded, the owner or developer must enter into a Performance Agreement with the City, in a form acceptable to the City Attorney, in accordance with these Subdivision Regulations.
- 8.1.2 Security Instrument. The security instrument shall reference the performance agreement, which shall stipulate the work to be performed by general categories and the estimated value or cost of each category. The performance agreement shall also stipulate a completion date for all of the work to be performed. Any changes or extensions to the timeframe or other stipulations as detailed within the performance agreement must be reviewed and approved by the Planning Commission.
- 8.1.3 <u>State of Tennessee Bank Collateral Pool</u>. The security shall be issued by a financial institution, which is currently a member of the State of Tennessee Bank Collateral Pool, as maintained by the State of Tennessee Treasury Department.
- 8.1.4 <u>Form of Security.</u> The security instrument shall express the value in a total amount equaling the sum of all work categories, and shall be in one of the following forms:
 - (1) Irrevocable Standby Letter of Credit. Issued by or confirmed by a financial institution which is a member of the Tennessee Bank Collateral Pool and located in Davidson County, Tennessee. Any such letter of credit shall bear an initial term of at least twenty-four (24) months. The approved financial institution shall have an office or branch located in the State of Tennessee and shall authorize the surety to be presented for demand or draw at a place physically located within a thirty (30) mile radius of the city

limits. The Letter of Credit option shall not be available to an applicant whose past performance has resulted in breached or expired securities.

- (2) Cashiers or Certified Check. Issued by a financial institution, which is a member of the Tennessee Bank Collateral Pool, and shall be non-expiring. All Cashier's checks accepted by the City shall be deposited into a special escrow account which will be used to complete the required improvements within a specified project (residential or commercial) should the developer fail to complete the required improvements. Upon completion of all required improvements and completion of the required maintenance period, if applicable, the remaining amount, less any necessary draws shall be returned to the developer.
- Issuing Bank Rating. Either instrument must be from an approved financial 8.1.5 institution having a "C" or better rating as shown in the latest edition of the LACE Quarterly Financial Institution Ratings guide compiled by the LACE Financial Corporation or its successors. An alternate rating issued by Standard & Poor's (S&P), Moody's Investor Service or Fitch Ratings shall be accepted by the City. Should the developer/subdivider elect to obtain an alternate rating using one of the companies shown above, the issuing financial institution shall have a minimum credit rating of "A" at the time of the submittal of the surety to Planning Department staff. The subdivider shall furnish applicable ratings data for the issuing financial institution with the submittal of the final subdivision plat. In no instance will ratings provided by an Internet bank rating company be accepted. Additionally, documentation detailing the issuing financial institution's stability will be required as part of the submittal. All applicable costs associated with providing the alternate rating shall be borne by the developer/subdivider. Approval of the security instrument by the City Manager or City Attorney shall be required before the subdivision plat may be recorded.
- 8.1.6 <u>Completion of Improvements.</u> The period within which the required improvements must be completed shall be specified by the City and incorporated within the security instrument. Any changes or extensions to the timeframe or other stipulations as detailed within the performance agreement must be reviewed and approved by the Planning Commission.
- 8.1.7 Required Rating. Should the LACE rating of the issuing financial institution fall below a "C" and/or the alternative credit rating from S & P, Moody's or Fitch falls below an "A" credit rating, the City shall provide written notification to the developer/subdivider to secure a new instrument that meets the requirements of these Regulations within ninety (90) days of the date of the notification. If a new instrument is not in place within ninety (90) days of the City's notification the City shall immediately process a draw on the letter of credit.

- 8.1.8 Second Bank Confirmation. Since a letter of credit represents the obligation only of the issuing bank, a confirmation shall be required stating that a line of credit has been secured from the confirming financial institution, when the financial ratings of the issuing bank falls below those specified as part of these Regulations, or when other ratings or reports are published that indicate the strength of the issuing bank is at risk, or the distance from the City of the branch office authorized to accept draws is more than thirty (30) miles. All documents presented by the confirming bank shall conform to the requirements of the original letter of credit and shall acknowledge the obligation of the confirming bank to assume the same responsibilities as the issuing bank, including the obligation to pay against presented documents. Payment from the confirming bank must be guaranteed regardless of the stability of the issuing bank. In lieu of a confirmation, a new letter of credit from a financial institution meeting these Regulations may be required.
- 8.1.9 <u>Inspections/Reductions.</u> The progress of the improvements shall be reviewed at least once a year by City staff, at which time the amount and expiration date of the security may be increased, reduced or extended, or the security may be released in recognition of significant work having been completed. If a reduction in the amount of the security for a platted subdivision is requested at any other time during the year by the applicant, a five hundred dollar (\$500.00) fee will be charged to defray inspection, processing and administrative costs. If for any reason, the security is not renewed or extended as required by the Planning Commission within thirty (30) days prior to the expiration date, or if the new documentation submitted is not in accordance with the requirements set forth herein, then the security will be assumed to be in default and the drawing on the security, in its full amount may be completed by City staff.
- 8.1.10 <u>Letter of Credit Criteria</u>. All letters of credit accepted for security for required improvements shall meet the following standards, as applicable:
 - (1) The initial term of the letter of credit shall be for a minimum of two (2) years from date of the recording of the final plat and shall be renewed as detailed within the performance agreement until project completion.
 - (2) All letters of credit shall include an automatic renewal clause that provides at least ninety (90) days' advance notice of any decision by the issuing financial institution not to extend the document's expiration date.
 - (3) The initial expiration date shall not fall on a weekend day, or national bank holiday.

(4) The following language (or substantially similar language, acceptable to the City) shall be included on all letters of credit accepted for subdivision or commercial building improvements by the City. The blanks shall be completed appropriately.

"We hereby issue this Irrevocable Standby Letter of Credit in your favor which is available at sight by drafts on (Name of Bank), bearing the clause "Drawn under Irrevocable Standby Letter of Credit Number_____", accompanied by:

Beneficiary's statement signed by one of its officials stating "(Name of the developer) has failed to complete certain improvements and/or has failed to obtain written authorizations for release from all affected agencies for the development project known as (Name of the project)."

- (5) Partial draws shall be permitted.
- (6) The following statement shall be included on all letters of credit;

 "The City may complete draws on this Letter of Credit by delivery via
 Registered or Certified mail, Federal Express or other similar courier
 service, or by facsimile, and the draw request with the required is
 presentable by facsimile to (Facsimile #), or by electronic mail to the
 following address _______."
- (7) All letters of credit must include a statement detailing the improvements for which they were originally issued.
- (8) Should a security instrument expire, it remains the developer's responsibility to replace the security instrument or complete the remaining outstanding work as identified in the approved construction plans.
- 8.1.11 <u>Security Instrument.</u> The security instrument shall name the City as obligee and shall be satisfactory to the City Attorney as to form, sufficiency and manner of execution.
- 8.1.12 <u>Term of Security Instrument</u>. The security instrument shall remain in force in its full face amount, subject to any reductions permitted hereunder, until all public improvements are completed and accepted for maintenance where applicable, by the City.
- 8.2 Failure to Complete Improvements.

In cases where a security instrument has been posted and required improvements have

not been completed within the terms of such security instrument, or the requirements of these Subdivision Regulations, the City Manager may declare the security to be in default and require that all the improvements be installed, regardless of the extent of the building development, or the expiration date of the security instrument, at the time the security is declared to be in default. The funds from the security shall be used to complete the improvements and / or to reimburse the City for any and all expenses that may be incurred to complete the improvements. In the event the security instrument does not adequately cover the costs incurred by the City to complete the improvements, the City may also place a hold on the issuance of building permits for those lots within the development, which have not had permits issued for construction until such time as the developer has reimbursed the City for the total cost of the improvements, including legal and administrative costs.

8.3 Completion of Approved Facilities within Designated Open Space Areas.

All facilities and improvements proposed for construction or installation by the developer in any designated open space areas shall be completed by the developer or the developer's successor in interest, unless otherwise approved by the Planning Commission. All such facilities and improvements shall be fully secured, with a letter of credit or other surety acceptable to the City Attorney prior to the recording of the first platted section of the subdivision to ensure completion in accordance with the approved development plan and within the overall timetable for such improvements if the developer fails to complete such obligations.

8.4 <u>Inspection/Testing of Improvements.</u>

If it is determined by inspection that any required improvements have not been constructed in accordance with the City's construction standards and specifications, the applicant shall be responsible for completing the required improvements in accordance with the adopted standards. Wherever the cost of improvements is covered by a security instrument, the developer and the issuing financial institution shall be jointly liable for the cost of completing the improvements according to the approved specifications.

8.5 Maintenance Security.

Upon release of a security instrument, guaranteeing completion of the improvements, the City shall require a maintenance security in an amount as determined by staff from the appropriate City departments. Said maintenance security shall remain valid for a period of time as stipulated within the performance agreement and shall be subject to the standards established in this Section.

The applicant shall be required to maintain all improvements including all lot improvements, until acceptance of the public improvements by the City or other appropriate entity.

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APPENDIX A: DEFINITIONS

<u>Usage</u>

- (1) For the purpose of these regulations certain numbers, abbreviations, terms, and words used herein shall be used, interpreted, and defined as set forth in this Appendix.
- (2) Unless the context clearly indicates to the contrary, words used in the present tense include the future tense and words used in the plural include the singular; the word herein means in these regulations; and the word regulations means these regulations.
- (3) A person includes a corporation, a partnership, and an unincorporated association of persons, such as a club; shall is always mandatory; a building or structure includes any part thereof; used or occupied, as applies to any land or building, shall be construed to include intended, arranged, or designed to be used or occupied.

Words and Terms Defined

<u>Applicant</u> – The owner of land proposed to be subdivided or his authorized representative. Consent shall be required from the legal owner of the premises.

<u>Architect</u> – An architect or landscape architect certified and registered by the State Board of Architectural and Engineer Examiners pursuant to Title 62, Chapter 2, <u>Tennessee Code</u> Annotated, to practice in Tennessee.

<u>Arterial Street or Road</u> – A major public street intended to move traffic to and from major industrial areas or a route for traffic between communities or large areas and which has an average daily traffic count in excess of three thousand (3,000) vehicles.

<u>Block</u> – A tract of land bounded by streets or by a combination of streets, public parks, cemeteries, railroad rights-of-way, or shorelines or waterways or a combination of such.

<u>Bond</u> – A performance security instrument with a clause, with a sum of money fixed as a penalty, binding the parties to pay the same. A Letter of Credit may be substituted for bond at the discretion of the City of Oak Hill. Also see definition for Letter of Credit.

<u>Build-out</u> – When certificates of occupancy have been issued for all the houses in a subdivision.

City Engineer – The City's authorized engineering representative.

City Manager – The person appointed by the Board of Commissioners to administrate the

daily operations of the City.

<u>Collector Street or Road</u> – A major public street intended to move traffic from local streets to arterial routes. Collector routes serve a neighborhood or large subdivision (s), and normally have an average daily traffic count ranging from one thousand and one (1,001) to three thousand (3,000) vehicles.

<u>Construction Plan</u> – The maps or drawings accompanying a subdivision plat and showing the specific location and design of improvements to be installed in the subdivision in accordance with the requirements of the Planning Commission, as a condition of the approval of the plat.

<u>Cul-de-sac</u> – A local street having only one (1) outlet and having an appropriate terminal for the safe and convenient reversal of traffic movement; definition includes dead-end, turn-around, or turn-about.

<u>Developer</u> – The owner of land proposed to be subdivided or his authorized representative; also referred to as "Applicant".

<u>Easement</u> – An authorization by a property owner for the use by another, for a specified purpose, of any designated part of his property.

<u>Engineer</u> – An engineer certified and registered by the State Board of Architectural and Engineer Examiners pursuant to Title 62, Chapter 2, <u>Tennessee Code Annotated</u>, to practice in Tennessee.

<u>External Subdivision Boundary</u> - All points along the periphery of a subdivision.

<u>Final Subdivision Plat</u> – The final map or drawing and accompanying materials, described in these regulations, on which the applicant's plan of the subdivision is presented to the Planning Commission for approval and which, if approved by the commission, is recorded with the County register of deeds.

<u>Flood-prone area</u> – The maximum area of the floodplain that, on the average, is likely to be flooded (i.e., that has a one (1) percent chance of being flooded in any year).

<u>Floodplain</u> – A land area adjoining a river, stream watercourse, bay or lake which is likely to be flooded. It is composed of a floodway and floodway fringe.

<u>Floodway</u> – The stream channel and adjacent overbank areas required to carry and safely discharge the one hundred (100) year flood without increasing flood levels more than one (1) foot above natural flood level.

<u>Floodway Fringe</u> – The area adjoining a watercourse which, although not lying within a floodway, has been or may hereafter be covered by a one hundred (100) year flood.

<u>Geotechnical Engineer</u> – A civil engineer licensed to work in the State of Tennessee whose area of expertise involves the science and practice of natural materials such as soil and rock mechanics.

<u>Governing Body</u> – The governing body in the City of Oak Hill is the Board of Commissioners. They are the three (3) elected officials within the City.

Grade – The slope of a public way specified in percentage terms.

<u>Registered Land Surveyor</u> – A land surveyor certified and registered by the State Board of Land Survey Examiners pursuant to Title 62, Chapter 18, <u>Tennessee Code Annotated</u>, to practice in Tennessee.

<u>Letter of Credit</u> – In these regulations this term means an Irrevocable Standby Letter of Credit (or a cashier's check) from an approved financial institution.

<u>Local Street or Road</u> – A public street intended to provide access to abutting properties and to other roads from individual properties.

<u>Lot</u> – A tract, plot, or portion of a subdivision or parcel of land intended as a unit for the purpose, whether immediate or future, or transfer of ownership, or for building development.

<u>Minor Subdivision</u> – Any subdivision containing four (4) or fewer lots fronting on an existing street not involving any new or improved street, the extension of utilities, or the creation of any new public improvements, and not in conflict with any provisions of the adopted general plan, major road plan, zoning ordinance or these regulations.

<u>National Flood Insurance Program</u> – A program established by the U.S. Government in the National Insurance Act of 1968, and expanded in the Flood Disaster Protection Act of 1973, in order to provide flood insurance at rates made affordable through a federal subsidy in local political jurisdictions which adopt and enforce floodplain management programs meeting the requirements of the National Flood Insurance Program regulations.

Off-Site – Any premise not located within the area of the property to be subdivided, whether or not in the same ownership of the applicant for subdivision approval.

One Hundred (100)-Year Flood – A flood having an average frequency of occurrence of one percent (1%) in any year. It is based on statistical analysis of stream flow records available for the watershed and analysis of rainfall and runoff characteristics in the general region of the watershed.

<u>Owner</u> – Any person, group of persons, firm or firms, corporation or corporations, or any other legal entity having legal title to or sufficient proprietary interest in the real property.

Performance Bond - See definition for Bond.

<u>Pavement</u> – All components of the roadway section above the subgrade, including the mineral aggregate base, bituminous plant mix base course, if any, and the asphaltic concrete wearing surface.

<u>Preliminary Plat</u> – The preliminary drawing or drawings, described in these regulations, indicating the proposed manner of layout of the subdivision to be submitted to the Planning Commission for approval.

<u>Public Improvement</u> – Any drainage ditch, roadway, parkway, sidewalk, pedestrian way, tree, lawn, off-street parking area, lot improvement, or other facility for which the local government may ultimately assume the responsibility for maintenance and operation or which may affect an improvement for which government responsibility is established.

<u>Right-of-Way</u> – A strip of land occupied or intended to be occupied by a public street, crosswalk, railroad, electric transmission line, oil or gas pipeline, water main, sanitary or storm sewer line, or for another special use. The usage of the term "right-of-way", for land platting purposes shall mean that every right-of-way hereafter established and shown on a final plat is to be separate and distinct from the lots or parcels adjoining such right-of-way and shall not be included within the dimensions or areas of such lots or parcels.

<u>Secretary of the Planning Commission</u> – This position is also the Chair of the Planning Commission unless otherwise designated by the Planning Commission.

<u>Setback</u> – The distance between a building wall and the nearest street right-of-way.

<u>Street</u> – Street or "Road" shall mean, relate to, and include roads, streets, highways, avenues, boulevards, parkways, lanes, or other ways or any part thereof.

<u>Subdivision</u> - Subdivision means the division of a tract or parcel of land into two (2) or more lots, sites, or other divisions requiring new street or utility construction, or any division of five (5) acres or less for the purpose, whether immediate or future, of sale or building development, and includes re-subdivision and when appropriate to the context, relates to the process of re-subdividing or to the land or area subdivided. (See Section 13-4-301, Tennessee Code Annotated.)

<u>Sub-grade</u> – Sub-grade refers to the top section of the prepared roadbed upon which the roadway pavement is placed.

<u>Zoning Ordinance</u> – An ordinance, legally adopted pursuant to Title 13, Chapter 4, <u>Tennessee Code Annotated</u>, for the purpose of regulating by district, land development or use for a designated area.

APPENDIX B: FORMS FOR FINAL PLAT CERTIFICATIONS

Certificate of Ownership

I (We) hereby certify that I am (we are) the owner(s) of the property shown hereon as evidenced in Book, Page, R.O.D.C., Tennessee and adopt the plan of subdivision of the property as shown hereon and dedicate all public ways and easements as noted. No lot or lots as shown hereon shall again be subdivided, re-subdivided, altered, or changed so as to produce less area than hereby established until otherwise approved by the City of Oak Hill Planning Commission and under no condition shall such lot or lots be made to produce less area than prescribed by the restrictive covenants as on record in Book, Page, R.O.D.C., Tennessee, running with the title to the property.			
Owner Name:			
Title:	Date:		
Surveyor's Certificate			
We hereby certify to the best of our knowledge, in opinion that the hereon shown subdivision plat repunadjusted ratio of precision of 1:15,000 and is tribeen placed as indicated. All side lot lines are otherwise noted.	presents a true and correct survey having an ue and correct. Approved monuments have		
By:	Date:		
Tenn. Registered Surveyor No.			
Certificate of Approval for Recording			
I hereby certify that the subdivision plat shown subdivision regulations of the City of Oak Hill, Davi			
By: Oak Hill Planning Commission	Date:		

Certificate of Approval of Water and Sewer Systems

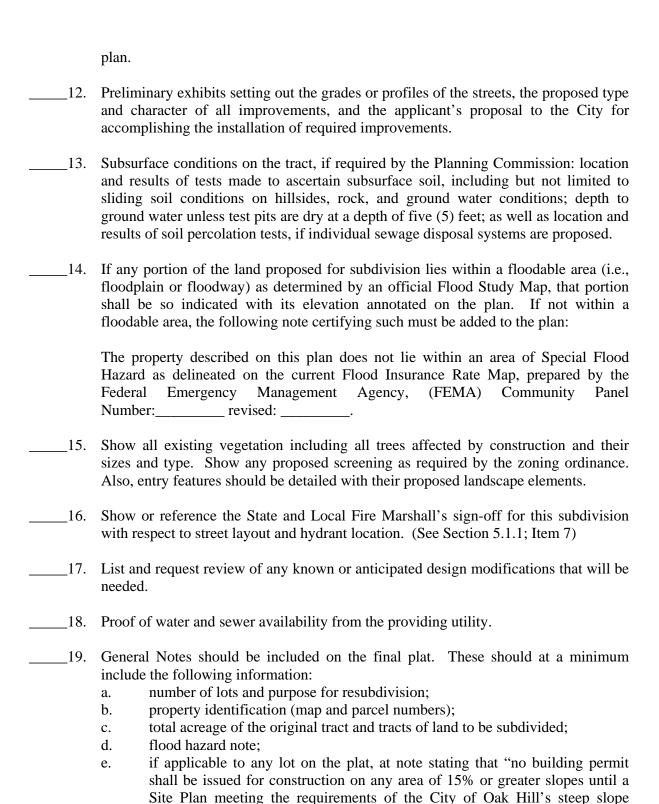
I hereby certify that:		
(1) The water and sewer systems designated in		Subdivision have been
installed in accordance with the districts specification		
(2) A performance bond in the amount of \$	for the water system	and \$ for the
sewer system has been posted with Metro Water Serv	ices, to assure comp	letion of such systems.
By:	Date:	
Title: Metro Water Services		
Metro Water Services		
Certificate of Approval of Streets and Drainage		
I hereby certify that:		
(1) The streets and drainage designated in		Subdivision have been
installed in accordance with City specifications, or		
(2) A performance bond or Letter of Credit in the a		
drainage has been posted with the City of Oak Hill improvements.	l, Tennessee, to assu	are completion of such
Ву:	Date:	
Title:		
City of Oak Hill		
Certification of Common Areas Dedication		
(Owner), in recording this plat, has hereon as common areas intended for use by the home recreation and related activities. The above-described the general public but are dedicated to the common us (<u>Name of Subdivision</u>) as more fully provided in Artic Restrictions, applicable to (<u>Name of Subdivision</u>), date plat. Said Article is hereby incorporated an	eowners in (<i>Name of</i> areas are not dedicate and enjoyment of the cle, Declaration ed, and made part of this p	f <u>Subdivision</u>), for ted hereby for use by the homeowners in on of Covenants and and recorded with this
Owner Name:		
Title:	Date:	

APPENDIX C

PRELIMINARY PLAT CHECKLIST

The preliminary plat shall provide with the following information (at a minimum):

1.	Pre-Application meeting with the City Manager. Pre-Application meeting date
2.	All elements of the Preliminary Plat checklist. Applicant shall submit the completed Preliminary Plat checklist with the Preliminary Plat.
3.	Name, stamp and signature of the Registered Land Surveyor responsible for preparation of the plat.
4.	The proposed name of the subdivision and all existing and proposed street names. The name(s) and address(es) of the owner(s) and authorized agents(s).
5.	Preliminary plats shall be drawn to a scale of not less than one (1) inch equals one hundred (100) feet $(1" = 100')$; or as otherwise required by the City of Oak Hill.
6.	Date, title, name and location of subdivisions, graphic scale, and true north point.
7.	The location of existing and platted property lines, lots numbered in numerical order, existing legal rights-of-way, buildings, water courses, wetlands, railroads, sewer lines, bridges, any public utility easements or lines, the present zoning classification, on the land to be subdivided and on the adjoining land; and the names of adjoining property owners or subdivisions.
8.	A location map of the subdivision shall be shown on the preliminary plat indicating the area within a one thousand $(1,000)$ feet radius of the proposed subdivision boundaries. Suggested scale: one (1) inch equals one thousand $(1,000)$ feet $(1" = 1000')$.
9.	A complete utility and drainage plan illustrating all existing and proposed utility improvements and layouts (streets, easements, reserved areas, lot drainage, culverts, driveway tiles, detention or retention pond, sewer lines and manholes, water lines and hydrants, street lights, gas, cable television, telephone and electricity) showing feasible connections for each lot and to the existing or proposed utility systems.
10.	The proposed street names, and the locations and dimensions of existing and proposed streets, alleys, easements, parks and other open spaces, reservations, lot lines, building setback lines and utilities.
11.	Topographical contours at vertical intervals of not more than five (5) feet extending at least 50 feet beyond outside property lines and identification of any proposed lots with grades of fifteen percent (15%) or more. Provide at least one benchmark on the



58

the Planning Commission."

ordinance (Oak Hill Municipal Code Section 14-238) has been approved by

APPENDIX D

FINAL PLAT CHECKLIST

The final plat shall include the following:

1	The final plat shall not be submitted non-reviewed prior to the signed approval of the
1.	The final plat shall not be submitted nor reviewed prior to the signed approval of the construction plans and drainage calculations, where required.
2.	All elements of the Preliminary and Final Plat checklists. Applicant shall submit the completed preliminary and final plat checklists along with the Final Plat.
3.	The name, stamp and signature of the Registered Land Surveyor responsible for preparation of the plat.
4.	The plat shall be drawn at a scale of not less than one (1) inch equals one hundred (100) feet (1"=100") on sheets sizes approved by the register's office. When more than one (1) sheet is required, an index sheet of the same size shall also be filed showing the entire subdivision with the sheets numbered in order as a key and reference appropriate project information.
5.	Street address for every proposed lot.
6.	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 true 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 streets.
7.	All dimensions to the nearest one hundredth (100 th) of a foot and angles to the nearest minute.
8.	The location and description of pins, monuments, benchmark locations and elevations.
9.	Private restrictions such as restrictive covenants and homeowners' documents should be referenced on the plat only.
10.	Show location of public streets and identification of street names within the subdivision. Proof of street name approval shall be submitted with the final plat application.
11.	All required certificates as shown in Appendix B.
12.	Final landscape requirements as necessary to satisfy the City of Oak Hill.
13	All outside houndary corners, breaks and key internal points (to be determined by the

	City of Oak Hill) are marked with concrete monuments. All other property corners and break points are marked with iron pins.
14.	NPDES StormWater Construction Permit, stream and wetlands determination letter and TDOT Construction permit on file, if required.
15.	Certification shall be provided to the City that all required physical improvements have been made and the City's written concurrence of the certification or bond posted in the required amount of the remaining improvements.

Subdivision Regulations of the City of Sevierville, Tennessee

and the

Sevierville Planning Region

DEPARTMENT OF PLANNING & DEVELOPMENT



Subdivision Regulations Of the City of Sevierville, Tennessee and the Sevierville Planning Region

Sevierville Regional Planning Commission

Lyle Overbay, Chairman

Bryan Atchley, Mayor Teddy Murrell Billy Carroll Jerry Loveday, Alderman Jim Arwood Alan Dillow

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Contents

	Answers to Questions Often Asked About Subdivision Regulations.	1
Article Article I	PURPOSE, AUTHORITY, AND JURISDICTIONA. PurposeB. AuthorityC. Jurisdiction	3 3
Article II	PROCEDURE FOR PLAT APPROVAL A. General. B. Preliminary Sketch Plat. C. Final Plat.	5 5
Article III	GENERAL REQUIREMENTS AND MINIMUM STANDARDS OF DESIGN. A . Streets B. Blocks C. Lots D. Public Use and Service Areas E. Suitability of the Land F. Large Tracts or Parcels G.Group Housing Developments H. Mobile Home Subdivisions I. Variances J. Zoning or Other Regulations	13 16 17 18 19 20
Article IV	DEVELOPMENT PRE-REQUISITE TO FINAL APPROVAL A. Required Improvements. B. Guarantee in Lieu of Completed Improvements.	23
Article V	REGULATIONS FOR REVIEW AND APPROVAL OF MINOR SUBDIVISIO A. Definition B. General Requirements	30
Article VI	ENFORCEMENT AND PENALTIES FOR VIOLATIONS	32
Article VII	ADOPTION AND EFFECTIVE DATE	33

APPENDIX	34
Appendix A: PERFORMANCE BOND FORM	
Appendix B: LETTER OF CREDIT FORM	
Appendix C: FORMS FOR FINAL PLAT CERTIFICATION	

Answers to Questions Often Asked About Subdivision Regulations

Are subdivision regulations fair to everyone?

Yes. The written regulations provide the local planning commission with uniform procedures, standards of design and construction by which to appraise equally and fairly all plats for land subdivision.

Who is affected by the regulations?

Every owner of land within the planning region who divides land into smaller parcels, or changes the size or shape of existing lots.

Am I affected if I resubdivide my tracts into two parcels?

Yes. Subdivision means the division of a tract or parcel of land into two or more lots, sites or divisions for immediate or future sale or building development, and includes resubdivision.

What's to prevent me from recording a subdivision plat without approval?

The County Registrar of Deeds is prevented by law from recording land subdivision lying within planning regions without final approval in writing.

Can I sell by an unapproved plat then record my lots by metes and bounds?

No. State law makes it a misdemeanor, punishable by law, to use an unapproved subdivision plat even if metes and bounds description is used in the instrument of transfer or sale.

What happens if I sell unapproved and unrecorded lots from my subdivision?

- A. A State law has been broken (Section 10, Chapter 22, Public Acts of 1951).
- B. Some cloud would exist on the title of the lot.
- C. Most lending agencies will not approve or guarantee loans.
- D. State law requires that public bodies shall not extend sewers, water mains, lighting or other utilities in unauthorized roads.
- E. Where zoning is in effect a building permit to construct any building will be withheld.
- F. Any building or structure erected in violation may be forced to be vacated or removed.
- G. The legislative body of a County or Municipality may stop sales by injunction or other legal action.

What improvements will I need to install in my subdivision?

Sevierville Subdivision Regulations require the developer to grade and improve streets, install monuments, sewers (where applicable), and water mains in accordance with adoptf3d specifications.

Why doesn't the lot buyer instead of the developer pay for improvements?

The lot buyer does - at the time he purchases his property. If lots are sold before improvements are in, the community bears the expense of providing needed improvements that should have been originally planned for and installed by the developer.

Won't subdivision regulations cause expensive development and cost me a lot of money? Quite the contrary! Properly planned subdivisions make the most of land with a minimum of construction and operating cost. Good design takes advantage of all capabilities of the site and

results in a minimum amount of streets and utilities with a maximum number of well-arranged and easier sold lots. Good land subdivision affects the value of the land and the immediate return to the investor, while saving the developer money.

How do I go about having a subdivision approved?

The Sevierville Planning Commission's printed set of regulations includes the procedure for having a plat approved. The planning commission meets at regular intervals and your preliminary sketch is submitted in advance of the meeting at which it is to be considered. It is suggested that you consult your planning commission early so as to become familiar with the official plans that might affect your area.

What if I wish to lay out a commercial or industrial subdivision?

The provisions of subdivision regulations apply to all subdivision of land, including that for use of business and industry. Since space, parking, and service requirements will vary greatly, it is impossible to establish standards for all types of uses. For that reason, specific requirements for lot sizes and area are set forth only for residential areas.

Where can I get technical site planning assistance?

The planning commission will help by recommending several competent subdivision designers who can contribute much to the financial success of your subdivision. Although they will not prepare final plans for you, trained planners are available.

SUBDIVISION REGULATIONS OF THE SEVIERVILLE, 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, the 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 planned region; to secure a coordinated layout and adequate provision for traffic and also to secure adequate provision for traffic and also to secure adequate provision for light, air, recreation, transportation, water, drainage, sewer and other sanitary facilities.

B. Authority

These subdivision regulations are adopted under authority granted by Sections 13-4-301 through 13-4-309 and Sections 13-3-401 through 13-3-411, Tennessee Code Annotated. The planning commission has fulfilled the requirements set forth in these statutes as pre-requisite to the adoption of such regulations. A certified copy of the Sevierville, Tennessee Major Street and Road Plan has been filed in the Office of the Registrar of Sevier County, Tennessee.

C. Jurisdiction

These regulations shall govern all subdivision of land within the corporate limits of Sevierville, Tennessee, as now or hereafter established within the Sevierville, Tennessee Planning Region as established by resolution of the Tennessee State Planning Office. Within these regulations the term "subdivision" shall mean the division of a tract or parcel of land into two (2) or more lots, sites, or other divisions for the purposes, whether immediate or future, of sale or building development, and includes re-subdivision and, when appropriate to the context, relates to the process of subdividing or to the land or area subdivided, provided, however, that "subdivision" does not include a division of any tract or parcel of land into two (2) or more tracts or parcels' when such parts or parcels are five (5) acres or larger in size. The term "road" shall mean, relate to, and include roads, streets, highways, avenues, boulevards, parkways, lanes, or other ways or any part thereof. The term "plat" shall mean plat, plan, plot or replot. The term "planning

commission" shall mean any regional planning commission established by the State Planning Office as provided by law, and includes any municipal planning commission designated by the State Planning Office as the regional planning commission of a planning region composed of the territory of a single municipality together with the territory adjoining but outside of such municipality. Any prospective subdivider owning land located within the Sevierville Planning Region shall submit a subdivision plat to the Sevierville Regional Planning Commission. The plat is to be submitted according to the procedures outlined in Article II, such 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 two separate steps. The initial step is the preparation and submission of a preliminary plat of the proposed subdivision and submission of a preliminary plat of the proposed subdivision to the planning commission. The second step is the preparation and submission to the planning commission of a final plat together with required certificates. The final plat becomes the instrument to be recorded in the Office of the County Registrar when duly signed by the secretary of the planning commission.

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 re-subdivide for this purpose, shall submit a plan of such proposed subdivision to the planning commission for approval and shall obtain such approval prior to the filing of his subdivision plat for record. Any such plat of subdivision shall conform to the minimum 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 these areas of jurisdiction shall be filed by the County Registrar without the approval of the planning commission.
- 2) The subdivider should consult early and informally with the planning commission and its technical staff for advice and assistance before the preparation of the prelim inary plat and its form all application for approval. This will enable the developer to become thoroughly familiar with these regulations, the Major Street and Road Plan, and other official plans or public improvements which might affect the area. Such informal review should prevent unnecessary and costly revisions.
- 3) A subdivider may omit the submission of a preliminary plat, 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 plat as prescribed by Section B of Article II.
- 4) All subdivision plats and the traverse on which they are based shall meet the requirements established in the "Standards of Practice" adopted by the Tennessee Board of Examiners for Land Surveyors.

B. Preliminary Sketch Plat

1) At least twenty(20) days prior to the meeting at which a preliminary plat is to be considered, the subdivider shall submit to the Sevierville Office of Planning and Development six (6) copies of the plat of the proposed subdivision in order to allow the planning commission's technical staff and utility officials time for necessary reviews and preparation of recommendations. The subdivision plan 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 or a designated representative shall issue a receipt acknowledging said submission. Neither the submission of the preliminary sketches plat to the secretary or the receipt issued by the secretary shall constitute submission of the preliminary sketch plat for consideration by the planning commission.

- 2) The sketch plat which shall meet the minimum standards of design as set forth in Article II, 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 and address of the owner or owners, and the name of the designer of the plat who shall be a licensed or certified engineer or surveyor approved by the planning commission.
 - b. Date, approximate north point, and graphic scale.
 - c. The location of existing and platted property lines, streets, buildings, water courses, railroads, sewers, bridges, culverts, drain pipes, water mains, and any public utility easements, 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. A construction plan which shall include:
 - 1. A complete drainage plan showing all improvements including all proposed streets, easements, storm sewers, swells, ditches, reserved areas and lot drainage.
 - 2. A plan and profile of all streets showing typical cross sections of proposed roadways, swells, and ditches as well as both existing and proposed finished grades of paved rights-of-way 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, pipe storm drains, ditches, and other drainage facilities including headwalls shall be shown on the plan and profile.
 - e. A location map showing relation of subdivision to well-known highways, railroads, and water courses in all directions to a distance of at least one-half mile. Suggested scale: one inch equals two-thousand (2,000) feet.
 - f. Plans of proposed utility layouts showing feasible connections to the existing or any proposed utility systems. When such connections are not practical, any proposed individual water supply and/or sewage disposal system must be approved by the County Health Department.
 - 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 (5) feet, except when specifically not

required by the planning commission.

- i. The acreage of the land to be subdivided.
- j. Surveyor's seal and certification as to the class of survey and the ratio of precision of the unadjusted survey (Up to 1:7,500).
- 3) Within sixty (60) days after submission of a preliminary sketch plat located in the planning region, or within thirty (30) days if located in the municipality, 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) Approval of a preliminary plat by the planning commission will not constitute final plat approval.
- 5) Failure of the planning commission to act on the preliminary sketch plat within the specified time frame as noted in B.3) after being presented at a planning commission meeting in accordance with subsections B.1) and B.2) of this Article will be deemed approval of this plat, 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.
- 6) One copy of the sketch plat will be returned to the subdivider with any notations at the time of approval or disapproval and the specific changes, if any, required.
- 7) The approval of the preliminary sketch plat 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.
- 8) If the subdivision is going to be developed and submitted as final plats in portions of the preliminary plat, the portions must be designated and titled in alphabetical characters.
- 9) No new subdivision shall use the name of an existing subdivision except one being developed in stages.
- 10) When a subdivision proposed for development involves changes to the land contour through grading, filling, excavating, removal or destruction of topsoil, trees or vegetative covering thereon, the developer shall submit a plan for erosion and sedimentation control. All plans for erosion and sedimentation control shall conform to applicable requirements of the National Pollutant Discharge Elimination System Permit issued for the City of Sevierville and any Permit that applies within the City of Sevierville Planning Region. A plan also shall be submitted to the Tennessee Department of Environment and Conservation in conformance with any state regulations or rules which apply to grading, erosion, and sedimentation.

- a. For all proposed subdivisions, erosion and sedimentation control plans shall be presented to the planning commission and shall meet the following guidelines:
 - 1. Topography: The development plan should be fitted to the topography and the soils in order to minimize erosion potential.
 - 2. Development Coordination: Erosion and sedimentation control measures shall be coordinated with the required steps in construction, and appropriate control measures installed prior to the start of construction.
 - 3. Sequential Control Measures: Land shall be developed in increments of workable size, on which, adequate controls of erosion and sedimentation can be provided and maintained during the construction period. Operations shall be staged so that the area being exposed for a long period of time without stabilization, and so that the initially disturbed areas are completely controlled, before the next section is opened. The developer shall be required to schedule sequentially phased controls of erosion and sedimentation as coordinated with the development and construction stages, and shall specify in detail precisely which areas will be cleared first, and how long these areas will be exposed to the elements. The maximum exposure period shall not exceed 120 days.
 - 4. Runoff Controls: Provisions shall be made to accommodate the increased runoff caused by changed soil and surface conditions during the ensuing development. Runoff must be intercepted and safely conveyed to storm drains or natural outlets where it will not erode or flood land. The drainage system for the development shall be completed and made operational as quickly as possible during construction.
 - 5. Cover: Wherever feasible, natural vegetation shall be retained and protected. Temporary vegetation and/or mulching shall be used where necessary to protect exposed areas during development.
 - 6. Sediment Basins (Debris Basins, Desilting Basins, or Silt Traps): Sediment basins shall be installed and maintained to collect sediment from runoff waters from land undergoing development. Storm sewer inlets with debris guards and mirco silt basins shall be provided to trap sediment and avoid possible damage by blockage.
 - 7. Final Vegetation and Structures: The permanent vegetation and structures shall be installed as soon as practical in the development.
 - 8. Paved Areas: Streets, parking lots, and other areas shall be paved as quickly as practical.

SUBDIVISION RECORD - PRELIMINARY PLAT

	Date Submitted For Preliminary Approval//		
Name of Su	bdivision		
Location	Civil DistrictZoning District		
Owner(s)			
Address	Phone		
Agent(s)			
Address	Phone		
Surveyor			
Address	Phone		
	Copies submitted as required prior to meeting. Drawn to required scale. Name, location, owner and surveyor. Date north point, and graphic scale. Location of all existing physical features on land and nearby properties. Names of adjoining property owners and/or subdivisions. Plans of proposed utility layouts. Names, locations, and dimensions of proposed streets, alleys, easements Parks and reservations, lot lines, etc. Profiles of all streets at required scales. Contours at not more than five-foot intervals. Acreage of land to be subdivided. Conforms to general requirements and minimum standards of design.		
Approved	/to proceed to final plat. Subject to the following modifications		
Disapproved	d/for the following reasons:		
Signed	Secretary of Planning Commission		

C. Final Plat

- 1) The final plat shall conform substantially to the preliminary sketch plat as approved, and, if desired by the subdivider, it may constitute only that portion of the approved preliminary sketch plat 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, the planning commission may waive the requirements for preliminary approval, and permit the developer to submit only a final plat.
- 2) In order to allow the planning commission technical staff and utility personnel ample time to review and prepare recommendations to the planning commission, the final plat shall be submitted to the planning commission at least twenty (20) days prior to the meeting at which it is to be considered. The subdivider shall submit six (6) copies of the drawings (blue line prints), together with street profiles or other plans that may be required.
- 3) The final plat shall be presented to the planning commission at its next meeting by the developer or designated representative for consideration for approval or disapproval.
- 4) The plat shall be drawn to 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 dimensions. 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 Registrar as the official plat of record.
- 6) The planning commission shall approve or disapprove the final plat within sixty (60) days if located in the region and within thirty (30) days if located in the municipality after its submission. Failure of the commission to act on this final plat within the specified time 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.
- 7) Approval of the final plat shall not constitute the acceptance by the public of the dedication of any streets or other public way or ground.
- 8) The final plat shall show:
 - a. The lines of all streets and roads, alley lines, lot lines, building setbacks, lots numbered in numerical order, reservations, easements, and any other 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 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 right-of-way of curved streets and curved property lines that are not the boundary of curved streets.
- c. All dimensions to the nearest one-hundredth (100th) of a foot and angles to the nearest minute.
- d. Location and description of monuments.
- 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. All boundary traverses including lot and block traverses.
- 9) The following certificates shall be presented with the final plat:
 - a. Certification showing that applicant is the land owner and dedicates streets, rights-of-way and any sites for public use (See Appendix C).
 - b. Certification by registered land surveyor to accuracy of survey and plat and placement of monuments (See Appendix C).
 - c. Certification by the City or County health offices when individual sewage disposal or water systems are to be installed (See Appendix C).
 - d. Certification by the City Engineer or other designated person 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, and utility policies, OR,
 - 2. Posting of security bond or cash bond in sufficient amount to assure such completion of all required improvements (See Appendix A).
 - e. Certification of approval to be signed by the secretary of the planning commission (See Appendix C).

SUBDIVISION RECORD – FINAL PLAT

	Preliminary Approval	Granted/
Date Submitted For FINAL Approval//		
Name of Subdivision		
Location	Civil District	Zoning District
Owner(s)		
Address	Phone	
Check List Submitted within the specific Copies submitted as required Drawn to scale ofinch equinches. Date, true north point, graph Reservations, easements, or Bearings of property lines and angles and tangent distance. Dimensions to the nearest 10 Lot lines, alleys, building sett Lines and names of all street Location and description of result Names and locations of adjoted Lots numbered in numerical Certificate of Ownership and Certificate of Accuracy. Certificate of Approval of Street Proposed deed restrictions if Conforms to General required Required physical improvem \$ Approved for Recording:	d prior to meeting. alsfeet on sheets not la ic scale, name and location r other non-residential areas ad sufficient engineering dat s. 00 th of a foot and angles to back lines. ts and roads. monuments. ining properties. order. Dedication. ater and Sewerage Systems eets and Utilities. f not a zoned area. ments and Minimum Stand ents have been made or bo	of subdivision. a to locate all lines including radii, the nearest minute. ards of Design. and posted in the amount of
Disapproved//_for the following	ng reasons:	
Signed:	. Secretary of t	the Planning Commission

ARTICLE III: GENERAL REQUIREMENTS AND MINIMUM STANDARDS OF DESIGN

A. Streets

- 1) Conformity to the Major Thoroughfare Plan: The location and width of all streets and roads shall conform to the official Major Thoroughfare Plan, which includes the Major Street Plan within the municipality and the Major Road Plan within the remainder of the planning region.
- Relation to Adjoining Street System: The proposed street system shall extend existing streets or projects at the same or greater width, but in no case less than the required minimum width.
- 3) Access Streets to Subdivision Boundaries: Sufficient access streets to adjoining properties shall be provided in subdivisions to permit harmonious development of the area.
- 4) Street Widths: The minimum width of the right-of-way, measured from lot line to lot line, shall be as shown on the Major Thoroughfare Plan and shall be not less than as follows:
 - a. Arterial Streets and Highways: 80-150 feet, as may be required. Arterial streets and highways are those to be used primarily for fast or heavy traffic and will be located on the Major Thoroughfare Plan.
 - b. Collector Streets: 50-60 feet. Collector streets are those which carry traffic from minor streets to the major system of arterial streets and highways and include the principal entrance streets for a residential development and streets for major circulation within such a development.
 - c. Minor Residential Streets: 50 feet. Minor residential streets are those which are used primarily for access to the abutting residential properties and designed to discourage use by through traffic.
 - d. Marginal Access Streets: 40 feet (or more width where necessary for adequate traffic conveyance and suitable infrastructure). Marginal access streets are minor streets which are parallel to, and adjacent to, arterial streets and highways, and which provide both access to abutting properties and protection from through traffic.
 - e. Dead-End Streets (Cul-de-Sac): 40 feet. Cul-de-Sacs are permanent dead-end streets or courts not to exceed six-hundred (600) feet or fifteen (15) dwelling units, designed so that they cannot be extended in the future. Note: In cases where topography or other physical conditions make a street of the required minimum width impractical, the planning commission may modify the above requirements.
 - f. Loop Streets: 40 feet. Loop streets are streets open at both ends and connected to only one residential street with a maximum length of twelve-hundred (1200) feet or twenty-five (25) dwelling units.

- g. Alleys: 20 feet. Alleys are minor public ways used primarily for service access to the back or side of properties otherwise abutting on a street.
- 5) Additional Width On Existing Streets: Subdivisions that adjoin existing streets shall dedicate additional right-of-way to meet the above minimum street width requirements.
 - 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 right-of-way width be less than forty (40) feet.
- 6) Restriction of Access: Where a subdivision abuts or contains an existing or proposed major street, the planning commission may require marginal access streets, reverse frontage with screen planting 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.
- 7) Street Grades: Grades on major streets shall not exceed seven (7) percent. Grades on other streets may exceed seven (7) percent but shall not exceed fifteen (15) percent.
- 8) Horizontal Curves: Where a deflection angle of ten (10) degrees or more in the alignment of a street occurs, a curve of reasonably long radius shall be introduced. On streets sixty (60) feet or more in width, the center line radius of curvature shall not be less than three-hundred (300) feet; on other streets, not 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 fifteen (15) times the algebraic difference in rates of grade for major streets and one-half this minimum length for other streets. 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 is possible, and no intersection shall be at an angle of less than sixty (60) degrees.
- 11) Tangents: A tangent 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 off-sets of less than one-hundred and twenty-five (125) feet shall not be allowed.
- 13) Sight Distance: On all streets constructed for the conveyance of vehicular traffic adequate sight distance shall be provided for the safe travel of vehicles. Sight distance standards employed by the American Association of State Highway and Transportation Officials (ASSHTO) shall be applied to the design and construction

of streets and roads, including horizontal and vertical curves, street intersections, street and driveway intersections, and connections of new thoroughfares with existing street and road systems.

14) Dead-End Streets

- a. Minor terminal streets or courts designed to have one end permanently closed shall be no more than six-hundred (600) feet long unless necessitated by topography. They shall be provided at the closed end with a turn-around having an outside roadway diameter of at least eighty (80) feet and a street right-of-way diameter of at least one-hundred (100) feet, or the planning commission may approve an alternate design such as the "T" or "Y" background.
- 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.
- 15) Private Streets and Reserve 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 no reserve strips controlling access to streets, except where the control of such strips is definitely placed with the community under conditions approved by the planning commission.
- 16) Drainage: All streets and roads must be so designed as to provide for the discharge of surface water from the right-of-way. 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 storm sewer system.
- 17) Street Name: 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 names for proposed streets duplicate existing street names, irrespective of the use of suffix street, avenue, boulevard, driveway, place, or court.
- 18) Alleys: Alleys may be required to the rear of all lots used for business purposes, and shall not be provided in residential blocks.

B. Blocks

- Length: Blocks shall not be less than four-hundred (400) feet, 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 cross walks.
- 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.

C. Lots

- 1) Arrangement: Insofar as practical, side lot lines shall be at right angles to straight street lines or radial to curved street lines. Each lot must front for a minimum of forty (40) feet upon a public street or road which is not less than forty (40) feet in width.
- 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 reasonably 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 served by a public sewerage system shall not be less than seventy-five 75) feet wide at the building setback line nor less than seventy-five hundred (7500) square feet in area, except mobile home lots shall be a minimum of five-thousand (5,000) square feet.
 - b. Residential lots not served by public sewerage systems shall not be less than forty(40) feet wide at the street right-of-way line, and a minimum of eighty (80) feet wide at the building setback line, and shall provide a minimum area of twenty-thousand (20,000) square feet. Greater area may be required for private sewage disposal if, in the opinion of the County Health Department, there are factors of drainage, soil condition, or other conditions to cause potential health problems. The planning commission may require that data from percolation tests be submitted as a basis for passing upon subdivisions dependent upon septic tanks as a means of sewage disposal.
 - c. The minimum size of residential lots to be served by a private source of water supply shall be determined by the County Health Officer after investigations of soil conditions, proposed sewerage system, and depth of groundwater. However, in no case shall these lots have less than a minimum area of twenty-thousand (20,000) square feet.
 - d. 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.
 - d. The sizes and widths of lots shall in no case be less than the minimum requirements of any zoning ordinance in effect.
 - 3) Building Setback Lines and Yard Requirements
 - a. The minimum depth of building setback lines from the street right-of-way line shall not be less than thirty (30) not be feet from minor residential and collector streets and forty (40) feet from all others. In case of corner lots, provide a setback of fifteen (15) feet from the side street right-of-way line,* unless a lower

standard is allowed by the existing zoning ordinance. A minimum side yard of six (6) feet on one side for all lots and a total minimum side yard setback of fifteen (15) feet is required for interior lots.

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

Voltage of Line Minimum Building Setback

 46KV
 37 ½ feet

 69KV
 50 feet

 161 KV and Over
 75 feet

4) Corner Lots: Corner lots shall be sufficiently wider and larger to permit the additional side yard requirements of the zoning ordinance or building setback lines as outlined above.

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 Space: 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, for park, school, or recreation purposes.

2) Easements for Utilities

- a. Drainage and utility easements shall be provided on each side and rear lot line where deemed necessary by the planning commission. The easements shall be designed to adequately provide utilities and drainage for all lots in the proposed subdivision. Where drainage is proposed to cross any lot at any point other than the side or corner of the lot, the plat shall indicate the size of the pipe necessary to carry the proposed runoff. Each cul-de-sac shall have provisions for a fifteen (15) foot utility easement extending therefrom to prevent dead-end water mains. Easements of the same or a greater width may be required along the lines of or across lots where necessary for the extension of existing/planned utilities.
- b. Storm Sewers: Where in the opinion of the planning commission the flow of water cannot be accommodated with surtace drainage, storm sewers may be required. The planning commission shall determine, on the basis of the watershed and the probable runoff, the size of the storm sewers. In ascertaining the size of the storm sewers, the planning commission may call upon its technical staff or any public or private agency to

assist it in its determinations.

- 3) Water Supply and Sewerage Connections: Where a public water supply or public sewerage system is reasonably accessible, the subdivider shall indicate connections with such water supply or sewerage system, and a water and 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 and sewage disposal may be indicated and shall be approved in writing by the County Health Officer.
- 4) Community Assets: In all subdivisions due regard shall be shown for all natural features such as large trees, water courses, historical sites, and similar community assets which, if preserved, will add attractiveness and value to the property.

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.

- 1) Flood Control Measures: 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, life or property or aggravate erosion of 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.
 - a. Fill may not be used to raise land in areas where the fill would increase flood levels.
 - b. All proposed developments containing land shown on the flood maps of Sevierville and Sevier County shall identify the floodway and flood fringe area on the proposed development plan, and the location of structures and improvements shall be subject to flood restrictions.
 - c. All development proposals shall have all public utilities and facilities located and constructed to minimize flood damage.
 - d. All development proposals shall have adequate drainage provided to reduce exposure to flood hazards.

F. Large Tracts or Parcels

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

G. Group Housing Developments

A comprehensive group housing development, including large scale construction of housing units and mobile home sites together with necessary drives and ways of access, may be approved by the planning commission, although the design of the project does not include standard street, lot and subdivision arrangements, if departure from the foregoing standards can be made without destroying their intent.

- 1) Planned Unit Development: For the purpose of these regulations, a planned unit development shall be a planned residential, commercial, or industrial development professionally designed as a unit on a parcel of land that may have separate ownership of, or acceptable lease arrangements and property in joint ownership. A planned unit development shall have ample open space provisions for the benefit and use of the residents. The open space shall be permanent and established in an appropriate legal manner. Planned unit developments shall include condominiums, mobile home parks, and similar group building developments formally or informally divided for development.
 - a. Planned unit developments shall generally comply with the standards established in these regulations, however, the uniqueness of each proposed development may require special consideration of these standards and they may be modified by the planning commission to achieve appropriate design arrangements.
 - b. The final site plan shall contain the location of proposed structures, roads, drives, parking, utilities, drainage, open space areas and all other requirements established for final approval.
 - c. A planned unit development plat shall show appropriate subdivision of properties.
 - d. No free standing building shall be closer than twenty (20) feet to any other free standing building and no closer than twenty-five (25) feet to any exterior property line.
 - e. Each development shall have a pedestrian circulation system plan and the walkways shall be improved a minimum of four (4) feet in width.
 - f. Any planned unit development within the corporate limits shall meet all requirements of the municipal zoning ordinance.
 - g. All planned unit developments within the corporate limits shall be served by a sanitary sewer. An alternative may be considered by the planning commission provided it shall be first approved by the County Health Department and reviewed by the Sevierville Water and Sewer Works Commission. In the planning region, the planning commission shall receive a favorable report from the Health Department prior to granting final approval.
 - h. A final landscaping plan shall be required. Landscaping shall be designed to lessen noise, improve the visual appearance and create a pleasing environment.

- i. A final open space plan shall be required. The open space shall be permanent and established through appropriate legal documents which shall be submitted with the plan. The documents shall show the manner or way in which the open space is owned and how it will be maintained. The open space plan shall also show all open space improvements such as swimming pools, tennis courts, golf courses, and similar open space uses.
- j. Changes and modifications in the final planned unit development plan shall be submitted to the planning commission as a revision request of the approved planned unit development.
- 2) Mobile Home Parks: A proposed mobile home park shall be considered as a Development informally dividing a land parcel into mobile home sites or spaces for the purpose of renting or leasing, and it shall be considered as a planned unit development and plats shall be submitted to the planning commission for preliminary and final approval.

H. Mobile Home Subdivisions

The planning commission may approve a subdivision with lots designed and established EXCLUSIVELY for mobile homes. These developments shall comply with the standards established herein.

- The minimum land parcel to be considered for proposed mobile home subdivision shall be two (2) acres.
- 2) The minimum lot size for proposed developments with individual septic tank sewage disposal systems or other similar systems shall be ten thousand (10,000) square feet. For developments with lots serviced by a sanitary sewer system, the minimum lot size shall be five thousand (5,000) square feet. However, within the corporate limits lot size will be determined by the density provisions in the zoning ordinance.
- 3) The minimum setbacks and yard requirements shall be the same as those established in these regulations.
- 4) Appropriate certificates shall be affixed to the final plat, and appropriate legal documents shall be recorded, to assure the planning commission that the proposed development shall be developed and utilized as mobile home lots exclusively.

I. Variances

Variances may be granted under the following conditions:

1) Where the subdivider can show that strict adherence to these regulations would cause unnecessary hardship, OR;

2)	Where the planning commission determines 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 and the reasons therefore shall be stated in writing in the minutes of the planning commission

J. Zoning or Other Regulations

No final plat of land within the force and effect of an existing zoning ordinance will be approved unless it conforms with such ordinance.

Note: 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.

ARTICLE IV: DEVELOPMENT PREREQUISITE TO FINAL APPROVAL

A perfectly prepared and recorded subdivision or plat means little to a prospective lot buyer until the person 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, and to install curbs, monuments, sewers, storm water inlets and water mains, in accordance with specifications established by the Sevierville Regional Planning Commission. Where specifications adopted by local authorities conflict with standards set forth in these subdivision regulations, the higher set of standards, as determined by the planning commission, shall govern.

1) Monuments

- a. Concrete monuments four (4) inches in diameter or square, three (3) feet long, with a flat top, shall be set at all street corners, at all points where the street lines intersect the exterior boundaries of the subdivision, and at angle points and points of curve in each street. The top of the monuments shall have indented cross to identify properly the location and shall be set flush with the finished grade.
- b. All other corners and points shall be marked with iron pins.
- 2) Street Elevation Above 100 Year Flood Level

All streets shall be constructed so that their surfaces for vehicular travel are situated at least one (1) foot above the elevation of the 100 Year Flood based upon the latest available flood maps provided by the Federal Emergency Management Agency (FEMA), or if no elevation is available, at least one (1) foot above the highest adjacent grade as defined in the Municipal Flood Damage Prevention Ordinance of the City of Seviervile, Tennessee.

3) Storm Water Drainage Measures

An Adequate storm water drainage system shall be required to manage runoff from the streets proposed for construction within a subdivision. An effective system may include storm sewers, pipes, culverts, catch basins, intersectional drains, drop inlets, bridges, ditches or swales, detention or retention basins, and other structures.

A stormwater drainage plan shall be submitted with the preliminary plat, as stated in Article II, Section B of these regulations. The plan shall be prepared only by a professional engineer (PE) licensed to practice in the State of Tennessee, when the following conditions occur: the plat subdivides an area of one acre or more; and, a street, road, or

way of five hundred (500) feet or more in length is proposed to access properties in the area subdivided on the plat. Also, only a professional engineer (PE) shall prepare a storm water drainage plan where detention or retention of storm water runoff is determined to be necessary. Arrangements for detention or retention generally shall be required for any proposed street, road, or way amounting to five-hundred (500) feet or more in length. However, storm water detention or retention may be required for any proposed street, road, or way of less than five-hundred (500) feet in length, as determined by the City Engineer. A land surveyor, licensed to practice in the State of Tennessee, may prepare a storm water drainage plan for a subdivision including a street, road or way consisting of less than five-hundred feet (500) in length, if the City Engineer determines that storm water arrangements for detention or retention are not necessary. With respect to a situation where a plat subdivides one or more acres, but does not include the creation of a street, then a storm water drainage plan may be required. In such an instance, the City Engineer shall determine the need to submit a plan, and the advisability of providing storm water detention or retention. Before any construction begins on the site of a subdivision, the developer shall obtain the approval of the Sevierville Regional Planning Commission. Each drainage plan submitted for approval must display the signed, professional stamp of the person preparing it.

A stormwater drainage plan shall be designed consistent with the particular stormwater regulations applying to a given location. Within Sevierville, the City of Sevierville Stormwater Ordinance shall govern the information and calculations provided in the plan, in addition to the requirements of these subdivision regulations. Outside of Sevierville's municipal boundaries, in the jurisdiction of the Sevierville Planning Region, the Sevier County Stormwater Resolution shall likewise govern the information and calculations provided by the plan. At a minimum, the submitted plan and any necessary stormwater detention or retention, should be based on a 25 year, 24 hour storm event, with the post-development runoff not exceeding the predevelopment runoff from a given site. All manholes, catch basins, inlets, and pipe shall be installed in accordance with the provisions of Section 611, "Manhole, Catch Basins, Inlets, and Pipe End Wall," Standard Specifications for Road and Bridge Construction, Tennessee Department Transportation. Construction of all storm water drainage structures shall conform to the plan approved by the Sevierville Regional Planning Commission. Any departure from the approved storm water drainage plan may result in denial of a final subdivision plat, or result in a planning commission action to refuse the release of an improvements guarantee (bond, irrevocable letter of credit, etc.).

For plans regarding erosion and sedimentation control see Article II, Section B, Subsection 10 of this document.

4) Street Construction Standards, Process, and Inspection. Streets constructed both Inside and outside of the municipal limits of Sevierville, but within the Planning Region, shall follow the construction standards and procedures set out below. Prior to initiating each stage in the construction process, as set out below, the developer and/or his contractor shall be responsible for notifying the City Engineer and/or County Road Superintendent so that an on-site inspection may be conducted at each stage of construction. Upon agreement with the County Road Superintendent, streets located outside the corporate limits may have the required inspections performed by the City

Engineering Department. (Notations given below to <u>Standard Specifications for Road and Bridge Construction</u> shall be assumed to refer to the latest edition of that document.)

- a. Initial Clearing. The removal of topsoil and other materials from the full width of the right-of-way shall be accomplished in accordance with Section 201, 'Clearing and Grubbing' and Section 202, "Removal of Structures and Obstructions, <u>Standard Specifications for Road and Bridge Construction</u>, Tennessee Department of Transportation.
- b. Grading. All streets, roads, and alleys shall be graded by the subdivider so that pavement and sidewalks may be constructed to the required cross-section. Deviation from the above due to special topographical conditions may be allowed only with a variance by the Planning Commission. Measures outlined in Section 209, "Temporary Project Water Pollution Control," <u>Standard Specifications for Road and Bridge Construction</u>, Tennessee Department of Transportation, shall be employed during all phases of street construction. Where streets are constructed under or adjacent to an existing electric transmission line or other structure, all grading for the street shall be done in a manner which will not disturb the structure or result in erosion detrimental to it. In the case of electric transmission lines, the clearance from pavement to the nearest conductor shall meet the requirements of the National Electrical Safety Code.
- C. Preparation and Construction of Subgrade. Preparation and construction of the subgrade shall be accomplished in accordance with Section 203, "Excavating and Undercutting," Section 205, "Embankments," and Section 207, "Subgrade Construction and Preparation," Standard Specifications for Road and Bridge Construction, Tennessee Department of Transportation. The density of the finished subgrade shall equal one hundred percent (100%) of the maximum density. The determination of the optimum moisture, maximum density, and density of the soil in place shall be in accordance with the provisions of Subsection 205.04, "Construction of Pavement Base," as referenced in the above named publication.
- d. After the subgrade has been inspected and found to meet the standard set out in Section C above, the roadbed shall be surfaced with Type A mineral aggregate crushed stone, pugmill mixed, with even wetting to maintain a uniform moisture count. In accordance with Section 303, "Mineral Aggregate and Base," Standard Specifications for Road and Bridge Construction, Tennessee Department of Transportation, the material shall be applied in reasonably close conformity with the lines, grades, thicknesses, and typical cross sections shown on the street plan/profile. The average

density shall not be less than ninety-five (95%) of maximum density, determined in accordance with the AASHTO T99, Method D. The following depths shall be required for compacted, crushed stone according to specific street classifications:

Local Streets – 8 inches (in 2 layers)

Collector and Arterial Streets (up to 1,000ADT*) – 8 inches (in 2 layers)

Arterial Streets (over 1,000ADT*) – 10 inches (in 2 layers) *(ADT) Average Daily Traffic for the Subdivision

- e. Curbing. Curbs shall be installed consisting of concrete, and having a height of six inches above the street pavement. All manholes, catch basins, inlets, and pipes shall be installed according to the provisions of Section 611, "Manhole, Catch Basins, Construction" and "Inlets and Pipe End Wall," <u>Standard Specifications for Road and Bridge Construction</u>, Tennessee Department of Transportation. Drop inlets shall be required on all streets or roads, and no curb cuts allowed for the drainage of storm water from such thoroughfares.
 - f.Application of Binder. Following completion and inspection of the subgrade and stone base, a binder course consisting of hot mix asphaltic concrete (307-B) shall be applied. The binder course shall be applied in accordance with Section 307, "Bituminous Plant Mix Base (Hot Mix)," <u>Standard Specifications for Road and Bridge Construction</u>, Tennessee Department of Transportation, and in reasonably close conformity with the lines, grades, thickness, and typical cross sections shown on the street plan/profile. The binder course shall be applied in the following depths, according to the the various street classifications:

Local Residential Street – 2 inches

Local Commercial Street – 3 inches

Collector or Arterial Streets (up to 1,000 ADT*) – 3 inches

Arterial Street (over 1,000 ADT*) - 5 inches of asphalt base and 2 Inches of Asphalt Leveling Binder (411-C)

*(ADT) Average Daily Traffic for the Subdivision

g. Application of Wearing Surface. Upon completion and inspection of the binder, the wearing surface shall be applied according to Sections 411 and 407 of the Standard Specifications for Road and Bridge Construction, Tennessee Department of Transportation. The wearing surface shall be asphaltic concrete, Type 411-E, as described in Section 411, "Asphaltic Concrete Surface (Hot Mix)," and measured and applied according to Section 407, "Bituminous Plant Mix Pavement (General)." The material shall be applied in accordance with the lines, grades, typical cross sections, and rate of application or thickness as shown on the street plan/profile and in these regulations. Asphaltic concrete shall be applied in the following depths:

Local Streets - 1 ½ inches

Collector (up to 1,000 ADT & 35 MPH or less) – 2 inches

Collector and Arterial Streets (up to 1,000 ADT & more than 35 MPH) – 2 inches with pavement markings according to the Manual of Uniform Traffic Control Devices (MUTCD)

Collector and Arterial Streets (over 1,000 ADT) – 1 ½ inches for

Asphalt Top with pavement markings according to MUTCD

h. Minium Street Improvement Widths. Street and road widths necessarily vary according to the functions of particular thoroughfares in the overall transportation network in the municipality and its planning region. Widths depend upon the nature of the building development accessed by the street or road, the character of the traffic carried by that street or road, and the type(s) of thoroughfares connecting with it. Below are the minimum widths of paving required for various classifications or categories of streets and roads:

Arterial Street – Width determined by state and local authorities, according to traffic needs

Collector Street – 28 feet (Greater width may be required where more than two traffic lanes are necessary for adequate traffic flow and safety.)

Local Residential Street - 26 feet

Local Loop Street – 20 feet (maximum of 1,200 feet in length or 25 dwelling units fronting it) (expansion of loop street width to 26 feet required where another street is extended from loop street)

Local Cul-de-sac – 20 feet (maximum length of 600 feet or 15 dwelling units)(expansion of cul-de-sac street width to 26 feet required where another street is extended from cul-de-sac street)

Marginal Access Street* - 20 feet (providing access to properties parallel to arterial or collector street or road, with a maximum length of 1,200 feet and/or 25 dwelling units)(greater width required for commercially oriented marginal access streets or residential extensions exceeding 1,200 feet and/or 25 dwellings)

One-Way Street – 16 feet

4) Installation of Utilities: After grading is completed and approved before any base is

applied, all of the underground works-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 for houses to be built by the developer shall be cut and drained.

5) Water Supply System: Where water mains are laid to serve newly constructed subdivisions, such mains shall have adequate diameters, valves, and any other associated structures needed to provide water for both domestic use and fire protection. Within the City of Sevierville, the adequacy of the water supply needed for fire protection shall be based upon the latest version of the National Fire Protection Association NFPA 1 Uniform

<u>Fire Code</u> that has been adopted by the municipality's Board of Mayor and Aldermen. A signed certification by a Professional Engineer (P.E.) shall be required for approval of a final plat in any subdivision of more than four lots where public water lines are extended to serve the development, and the certification shall confirm that flows of necessary fire hydrants are adequate to meet the standards of the above stated code as adopted by the City of Sevierville (see Article II, C, 9 and Appendix C of these regulations).

6) Sanitary Sewers

- a. Where lots cannot be economically connected with a sewerage system, they must contain adequate area for the installation of approved septic tank and disposal fields and must be approved in writing by the County Health Officer.
- b. All lots connected to the City sewerage system shall meet all requirements of the Water and Sewer Board.
- c. All lots connected to a sewer system shall be approved by the utility operating the system. They shall meet all requirements of the State Health Department and shall be approved by the Sevier County Health Department.
- d. Subdividers shall supply all data required for the installation and/or operation of the sewerage system to the Water and Sewer Board, Sevier County Health Department and the Tennessee State Department of Health.
- 7) Street Name Signs: Appropriate street signs also add sales value to land subdivisions and enable strangers, delivery concerns and even potential lot buyers to find their way around. Street names should appear at all intersections. Upon request, the planning commission will aid the subdivider with specifications for the construction, placing and setting of such signs.

B. Guarantee in Lieu of Completed Improvements

No final subdivision plat shall be approved by the planning commission or accepted for record by

- 1) All required improvements have been constructed in a satisfactory manner and approved by the City of Sevierville, Tennessee.
- 2) The planning commission has accepted a security or 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 City 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 during the performance bond that the extent of the building development that has taken place in the subdivision is not

sufficient to warrant all the improvements covered by such performance bond, that required improvements have been installed as provided in this Section in sufficient amount to warrant reduction in the face amount of said bond, or that the character and the extent of such development require additional improvements for any or all such improvements, the face value of such performance bond shall be thereupon reduced or increased by an appropriate amount so that the new face amount will cover cost in full of the amended list of improvements.

Performance bonds which are submitted in lieu of the installation of required improvements shall be in 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 the form as shown in "Appendix A", said "Appendix A" is made a part of these subdivision regulations.

ARTICLE V: REGULATIONS FOR THE REVIEW AND APPROVAL OF MINOR SUBDIVISIONS

This article sets forth procedures designed to expedite the review and approval process for minor subdivisions. Due to the nature of minor subdivisions, no development other than the platting process is required. Therefore, ARTICLE IV of the Sevierville Subdivision Regulations does not apply to minor subdivisions.

A. Definition

In order to be considered a minor subdivision the tract or parcel of land to be subdivided shall be located in an existing open public road that has been accepted and is being maintained by the County or State Highway Department and shall be situated in a manner that there are no changes in existing streets, no new streets or easements of access, and no excavation, grading or physical development needed and the property must be adequately provided with existing community facilities to the extent that no extensions of water, sewer or gas lines are required.

B. General Requirements

All requirements and design standards, including requirements for the preparation of subdivision plats, will be the same as set forth in ARTICLE I through ARTICLE III of the Sevierville Subdivision Regulations.

Minor subdivisions will be considered for official approval at each regularly scheduled meeting of Sevierville Regional Planning Commission. In the event that it places an extreme and undue hardship on the developer or selling agent, a special review committee may review the subdivision prior to the regular monthly meeting. The special review committee may grant tentative approval and permission to sell, pending official approval by the Sevierville Regional Planning Commission. The following procedures and policies shall govern the review and approval of minor subdivisions:

- 1) At least ten (10) days prior to the meeting at which it is to be considered, the subdivider shall submit to the secretary of the planning commission or the planning commission technical staff four (4) copies of the subdivision plat.
- Requests for special review and approval due to hardship must be accompanied by a statement explaining the nature of the hardship and reasons why special review is necessary.
- 3) Preliminary approval may be granted prior to Health Department approval (includes layout and design of the subdivision and development requirements).
- 4) Permission to sell subject to final approval may be granted either by the full commission or the minor subdivision sub-committee.
- 5) Permission to sell cannot be granted unless the plat has received Health Department approval.

- 6) Subdivisions must be properly marked at all corners and survey points with iron pipe or solid steel rods not less than one-half (1/2) inches in diameter and twenty-four (24) inches in length.
- 7) If permission to sell is granted, the sale is made subject to any changes or additional requirements requested by the planning commission *for* final approval and buyers of the property shall be properly informed of this condition by the person(s) selling the property.

ARTICLE VI: ENFORCEMENT AND PENALTIES FOR VIOLATIONS

The enforcement of these regulations and penalties *for* the unapproved recordation or transfer of land is provided by State Law in the authority granted by Public Acts of the State of Tennessee.

A. Enforcement

- No plat or plan of a subdivision of land into two or more lots located within the Sevierville Planning Region shall be admitted to the land records of the County or received or recorded by the Country Registrar of Deeds until said plat or plan has received final approval in writing by the planning commission as provided in Section 13-3-402, 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, or unless such road corresponds in its location and lines to a road shown on a subdivision plat approved by the planning commission, or on a road plan made and adopted by the commission as provided in Section 13-3-406, 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 13-3-402, 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) Sections 13-3-410 and 13-3-406, 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 by this Act and before such plat be recorded in the office of the County Registrar, 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 documents used in the process of selling or transferring shall not exempt the transaction from such penalties." In the case of the regional planning commission, Section 13-3-410, Tennessee Code Annotated, provides that the County through its County Attorney, or other official designated by the Quarterly County Court may enjoin such transfer or sale agreement by action or injunction.
- 3) Any building or structure erected or to be erected in violation of the subdivision regulations shall be deemed an unlawful building or structure, and the building commissioner of the solicitor of the municipality or other official designated by the chief legislative body and/or county attorney or other official designated by the Quarterly County Court may bring action to enjoin such erection or cause it to be vacated or removed as provided in Section 13-311, Tennessee Code Annotated.

ARTICLE VII: 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.

Adopted:	/	<u>/</u>
Effective:	/	
Signed		
_		Secretary
		Sevierville Regional Planning Commission



Appendix

Appendix A

Performance Bond Form

KNOW ALL MEN by these presents:		
WHEREAS,	e of Tennessee (hereinafter c	Principal herein located in Sevier located in Sevier located a surety company localled the "surety"), and;
WHEREAS, the plans and speconstruction, and installation of streets therein have been filed with the Sapproval, and which are referred to a and set forth therein, and;	s, roads, curbs, and utilities a Sevierville Regional Planning	and other improvements g Commission for final
WHEREAS, the Principal here complete the construction and insta utilities, and all other improvements plans and specifications now on forcommission.	Illation of all streets, roads, in the said subdivision in ac	sidewalks, curbs, and ecordance with the said
NOW, THEREFORE, the Principal and the Sevierville Planning Commission for Tenneseee, in the sum of \$ Principal of its undertaking herein, and Subdivision in the construction of all the improvements therein called for by the before the day of this obligation to be null and void, other	conditioned upon the perf I its completion of said_ ne streets, sidewalks, roads, completed and same to both the perf 20, and upo	formance by the curbs, and all other be completed on or not the completion thereof
If the Principal fails to complete the coas shown and provided for by said p time herein specified, the Planning Cocompletion of said work by order duly for a period of from thirty (30) to ninety	plans and specifications here mmission may in its discretion made and entered by the sai	in referred to within the n extend the time for the
WITNESS our hands this the	day of	, 20
WITNESS		
PrincipalSurety		

Appendix B Agreement

This Agreement entered into at Sevierville, Tennessee, on this the day of, 20, by and between,
hereinafter referred to as the "Developer", a Tennessee Banking Corporation, hereinafter referred to as "Bank" and Sevierville Regional Planning Commission, hereinafter referred to as "Commission".
Recitals
1) Whereas, Developer desires to develop a subdivision known as to be located within the jurisdiction of Commission;
2) Whereas, Bank desires to finance the development of said subdivision, and to provide credit which shall secure the completion of improvements to said subdivision required by Commission;
3) Whereas, Commission desires security for the completion of improvements to said subdivision in accordance with specification and time schedule authorized by Commission.
Witnesseth
1) Developer agrees that the itemized list of specifications for improvements to said attached hereto and marked Exhibit "A" are those specified by the Commission and that the timetable for completion thereof attached hereto and marked Exhibit "B" have been established by the Commission, and hereby reaffirms its agreement to complete said improvements in accordance with the specifications of the Commission and within the time schedule established by the Commission.
2) The parties hereto agree to the amount of \$ as appropriate to establish as security for the completion of said improvements.
3) Bank hereby agrees that it has and is hereby reaffirming an irrevocable line of credit to Developer to secure the completion of the herein above described improvements in accordance with specifications and the time schedule established by the Commission, and does hereby agree to honor the assignment stated herein below from the Developer of the Commission of any and all funds necessary to complete said improvements in accordance with Commission specifications and time schedule, up to the amount of \$ Bank agrees and warrants to Commission that said line of credit will be sufficient to complete said improvements by Commission up to the maximum

amount stated.

- 4) By affixing their authorized signatures to this Agreement, Bank and Developer do hereby agree that the line of credit extended by Bank to Developer for the amount described herein above is irrevocable by either Bank or Developer until a written release is received by Bank and Developer.
- 5) Developer does hereby make to Commission an irrevocable assignment of the proceeds of a line of credit from Bank to Developer described herein above for the completion of said improvements to the extent necessary to complete said improvements in accordance with the specifications of the Commission and in accordance with the time schedule established by Commission.
- 6) Developer agrees that it shall make no attempt to revoke said assignment at any time prior to the receipt of a written release from Commission.
- 7) It is agreed between the parties that the herein above described assignment is made by Developer by affixing his signature hereto, but that said assignment shall be exercised by Commission only in the even the herein above described improvements are not completed in accordance with Commission specifications and/or in compliance with the time schedule established by the Commission.
- 8) Bank hereby agrees that it will honor said assignment and provide to Commission any and all funds necessary, to complete said improvements in accordance with Commission specification and time schedule up to the maximum amount of \$_____ upon written notification from Commission of the failure of Developer to comply with said specifications and/or said time schedule.
- 9) As between Bank and Commission, it is agreed that said notification is conclusive of non compliance, and Bank shall take no action to delay or deny its agreement to honor said assignment from Developer to Commission.
- 10) Bank agrees that any and all funds paid to Commission in accordance with the assignment made between Developer and Commission herein shall be debited against the credit of Developer, and Bank will in no event attempt to hold the Sevierville Regional Planning Commission liable under any legal or equitable principle for the repayment of said funds.
- 11) Commission agrees that it shall give Developer five (5) days written notice of its intent to exercise its assignment described herein above, and the specific reasons therefor. If Developer makes no written reply to Commission within said five (5) days, developer

hereby agrees it shall take no action, legal or otherwise, to interfere with said assignment, and by its failure to respond within said five (5) days, shall be deemed to acknowledge non-compliance with the specifications of Commission and/or the time schedule as specified in the notice received by Developer, and to the amount of the assignment.

12) This Agreement shall be binding upon and inure to the benefit of the parties hereto, their heirs, administrators, and assigns, and shall not be modified or terminated without the written agreement of all parties hereto.

	Devel	loper	
		•	

CERTIFICATE OF APPROVAL FOR RECORDING

Subdivision Regulations of the City of Sevierville, Tennessee and the Sevierville Planning Region, 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 registrar. Date:_____ SECRETARY, PLANNING COMMISSION CERTIFICATION OF THE APPROVAL OF WATER AND SEWAGE SYSTEMS I hereby certify that the water supply and/or sewage system installed, or proposed for installation, fully meets the requirements of the TENNESSEE STATE HEALTH DEPARTMENT, and are hereby approved as shown. Date: GENERAL MANAGER, SWS CERTIFICATION OF STREET NAMES I certify that all street names have been approved by the SEVIER COUNTY EMERGENCY COMMUNICATIONS DISTRICT, are in compliance with E-911 specifications, and do not conflict with other street names in the county. Date:

I hereby certify that the subdivision plat shown here has been found to comply with the

CERTIFICATION OF THE APPROVAL OF STREETS

E-911 COORDINATOR

I hereby certify: (1) that streets and related appurtenances have been installed in an acceptable manner, and according to specifications, or (2) that a surety bond in the amount of
has been posted with the PLANNING COMMISSION to assure completion of all required improvements in case of default.
Date:
CITY ENGINEER OR COUNTY ROAD SUBERINTENDENT
CERTIFICATE OF OWNERSHIP AND DEDICATION
(I, We) 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.
Date:
OWNER
Date:
OWNER
Date:
OWNER
I HEREBY CERTIFY THAT THIS IS A CATEGORY I SURVEY, AND THE RATIO OF PRECISION OF THE UNADJUSTED SURVEY IS 1:10,000 OR GREATER, AND I HEREBY CERTIFY THAT I MADE THIS SURVEY AND MAP AND THAT BOTH ARE CORRECT TO THE BEST OF MY KNOWLEDGE.
Date
SIGNATURE

SUBDIVISION REGULATIONS

FOR

SMYRNA, TENNESSEE



Approved and Adopted by the Smyrna Municipal Planning Commission On July 2, 2009

Smyrna Municipal Planning Commission:
 Marc Adkins, Chair
 Edwin Davenport, Vice-Chair
 Bob Spivey, Mayor
 Lance Lee, Councilman
 Sam Coleman
 Mike Sparks
 Rob White

Originally Prepared By

Don E. Martin

Department of Economic and Community Development Local Planning Office

Originally Approved and Adopted by the Smyna Municipal Planning Commission on October 3, 1996.

Subsequently amended on

- ♦ July 2002
- ♦ November 2003
- ♦ May 2005
- ♦ March 2006
- ♦ May 2007

Updated and Revised July 2009

Revision Committee:

Kevin Rigsby, Town Planner
Melissa Morrison, Planner
Jack Reinhard, Director of Utilities
Mark Parker, Assistant Director of Utilities
David King, Director of Public Works
Jerome Dempsey, Engineer of Record (Dempsey, Dilling and Associates)
Larry Goldman, Building Official
Michele Komorowski Elliott, Town Attorney
Alford Fann, Board of Zoning Appeals Representative
Tim Morrell, Planning Commission Representative
Butch Fish, Contractor Representative
Andy Johns, Builder Representative

TABLE OF CONTENTS

SMYRNA SUBDIVISION REGULATIONS

SECTION	<u>[</u>	<u>Page</u>
	ARTICLE 1	
GENERA	L PROVISIONS	6
1-101 1-102 1-103 1-104 1-105	Title	6 6 6
1-106 1-107 1-108 1-109	and Severability Saving Provision Repeal of Previous Regulations Amendments Enforcement, Violation and Penalties	9
1-110	Specific Statutory Remedies	12
	ARTICLE 2	
DEFINITION	ONS	13
2-101 2-102	Usage Words and Terms Defined	13 13
	ARTICLE 3	
PROCED	URES	22
3-101 3-102 3-103 3-104	Conditions	22 25
3-105	Subdivisions Only) Final Subdivision Plat (Minor	
3-106	and Major Subdivisions) Signing and Recording of Subdivision Plat	
3-107 3-108 3-109	Subdivision Plat Development Agreement Resubdivision of Land Vacation of Plats	31

3-110	Variances	32
	ARTICLE 4	
SPECIFICAT	ΓΙΟΝS FOR SUBMITTALS	34
4-101 4-102 4-103 4-104	Sketch Plat	34 37
	ARTICLE 5	
REQUIREME AND DESIG	ENTS FOR IMPROVEMENTS, RESERVATIONS GN	47
5-101 5-102 5-103 5-104 5-105 5-106 5-107 5-108 5-109 5-110 5-111	General Requirements Lot Requirements Public Ways Road Construction Specifications Drainage and Storm Sewers Water Facilities Sewage Facilities Pedestrian Ways Utility Easements Public Uses Preservation of Natural Features and Amenities Nonresidential Subdivisions ARTICLE 6	51 54 65 68 69 70 71 72
PUBLIC WO	RKS SPECIFICATIONS	75
General		75
6-101 6-102 6-103 6-104 6-105 6-106	Jurisdiction Purpose Definitions Approvals Acceptance Responsibility of Compliance	75 75 75 76
Planning		77
6-201 6-202 6-203 6-204	Plan Preparations Content Submission, Review, and Approval Action Upon Approval	77 77

Typical Sect	Typical Sections				
6-301 6-302	Drawings				
Materials Sp	ecifications and Construction Procedures111				
6-401 6-402 6-403 6-404 6-405	Preliminary Work				
	ARTICLE 7				
ASSURANC OF IMPRO	E FOR COMPLETION AND MAINTENANCE VEMENTS123				
7-101 7-102 7-103 7-104 7-105 7-106	Improvements and Performance Bond				
	ARTICLE 8				
ADOPTION	OF REGULATIONS AND AMENDMENTS128				
8-101	Original Enactment				
POST-ADOF	APPENDIX PTION AMENDMENTS129				

ARTICLE 1

GENERAL PROVISIONS

- 1-101 <u>Title</u> -- These regulations shall hereinafter be known and cited as the Subdivision Regulations of Smyrna, Tennessee.
- Authority -- These subdivision regulations are adopted by the Smyrna Municipal Planning Commission (hereinafter referred to as "Planning Commission"), in pursuance of the authority and powers granted by Section 13-4-301 through 13-4-309, Tennessee Code Annotated. Having adopted a comprehensive plan, including a major thoroughfare and a land use plan for the jurisdictional area, having and filed a certified copy of the plan with the Rutherford County Register of Deeds (hereinafter referred to as "county register"), as required by Section 13-4-302, Tennessee Code Annotated, and having held a public hearing as indicated in Section 1-108.1 of these regulations, the Planning Commission has fulfilled the requirements set forth in state law as prerequisites to the adoption of these regulations.
- 1-103 <u>Jurisdiction</u> -- These subdivision regulations shall apply to all subdivisions, as herein defined, located within the corporate limits of Smyrna, Tennessee. No land shall be subdivided within the jurisdictional area until the subdivider submits a plat as required by these regulations, obtains Planning Commission approval of the plat, and files the approved plat with the county register.
- 1-104 Policy and Purpose -- It is hereby declared to be the policy of the Planning Commission to consider the subdivision of land and development of a subdivision plat as subject to the control of the adopted land use or community development plan (hereinafter referred to as "land development plan") of the jurisdictional area for orderly, planned, and efficient physical and economical development.

Land to be subdivided shall be of such character that it can be used for building purposes without danger of health, fire, flood, or other menace. Land shall not be subdivided until proper provisions have been made for drainage, water, sewerage, other public utilities, and for other required public services. The existing and proposed public improvements shall generally conform to and be properly related to the proposals shown in the land development plan.

The regulations herein shall supplement and facilitate the enforcement of the provisions and standards contained in the Town of Smyrna Muncipal Zoning Ordinance (hereinafter referred to as "zoning ordinance").

These regulations are adopted for the following purpose:

- (1) To promote the public health, safety, and general welfare of the jurisdictional area.
- (2) To guide the development of the jurisdictional area in accordance with the land development plan, considering the suitability of nonresidential and public areas and having regard for the most beneficial land use in such areas.

- (3) To provide for adequate light, air, and privacy; to secure safety from fire, flood, and other dangers; and to prevent overcrowding of the land and undue congestion of population.
- (4) To enhance the character and economic stability and encourage the orderly, beneficial development of the jurisdictional area.
- (5) To conserve the value of land, buildings, and improvements throughout the jurisdictional area and to minimize detrimental conflicts among the uses of land and structures.
- (6) To guide public and private policy and action providing for transportation, water, sewerage, schools, recreational areas, and other public requirements and facilities.
- (7) To provide for the most beneficial relationship between the uses of land and buildings and the efficient traffic movement throughout the jurisdictional area.
- (8) To establish reasonable standards of design and procedures for subdivisions and resubdivisions; to further the orderly layout and use of land; and to insure proper legal descriptions and proper monumenting of land.
- (9) To insure that public facilities are available and will have a sufficient capacity to serve the proposed subdivision.
- (10) To prevent the pollution of air, streams, and ponds; to assure the adequacy of drainage facilities; to safeguard the water table; and to preserve the integrity, stability, beauty, and value of the jurisdictional area.
- (11) To preserve the natural beauty and topography of the jurisdictional area, and to insure appropriate development with regard to these natural features.
- (12) To provide for open spaces through efficient design and layout of the land, including the use of average density in providing for minimum width and area of lots, while preserving the density of land as established in any zoning ordinance.
- (13) To encourage subdivision design which would maximize the conservation of all forms of energy.
- (14) To assure that all the most current requirements of the national flood insurance regulations are met.

1-105 Interpretation, Conflict, and Severability

1-105.1 <u>Interpretation</u> -- These regulations shall be held to be the minimum requirements for the promotion of health, safety, and general welfare.

1-105.2 Conflict with Public and Private Provisions

1-105.201 Public Provisions -- These regulations are not intended to interfere with, abrogate, or annul any other ordinance, rule, or regulation, statute, or other provisions of law. Where any provision of these regulations imposes restrictions different from those imposed elsewhere within these regulations, or by any other ordinance, rule, regulation, or other provision of law, whichever provisions are more restrictive or impose higher standards shall control.

1-105.202 Private Provisions -- These regulations are not intended to abrogate any easement, covenant, or any other private agreement or restriction; provided, that where these regulations are more restrictive or impose higher standards than such easement, covenant, or other private agreement or restriction, the requirements of these regulations shall govern.

Where any private provision exceeds the standards set forth herein, such shall be considered a private contract between the parties of interest, and as such is beyond the jurisdiction of the Planning Commission.

- 1-105.3 Severability -- If any part or provision of these regulations or application thereof to any person or circumstances is adjudged invalid by any court of competent jurisdiction, such judgment shall be confined in its operation to the part, provision, or application directly involved in the controversy in which such judgment shall have been rendered and shall not affect or impair the validity of the remainder of these regulations or the application thereof to other persons or circumstances. The Planning Commission hereby declares that it would have enacted the remainder of these regulations without any such part, provision, or application.
- 1-106 Saving Provision -- These regulations repeal the Subdivision Regulations of Smyrna, Tennessee, adopted April, 1979 as amended, and as such shall not be construed as abating any action pending under, or by virtue of prior subdivision regulations; or as discontinuing, abating, modifying, or altering any penalty accruing or about to accrue; or as affecting the liability of any person; or as waiving any right of the governing body under any section or provision existing at the time of adoption of these regulations; or as locating or annulling any rights obtained by any person by lawful action of the governing body, except as expressly provided otherwise in these regulations.

1-106.1 Previously Approved Subdivisions

1-106.101 <u>Unexpired Preliminary Approval</u> -- The approval granted on any plat prior to the effective date of these regulations shall remain in force and effect for the time period stipulated by the regulations under which the approval was first granted.

- 1-106-102 Expired Preliminary Approval -- In any instance in which the period of preliminary approval shall have passed with some portion of the subdivision not having received final approval, and the applicant wishes an extension of the preliminary approval, the Planning Commission may:
 - (1) permit the remaining portion of the subdivision to be constructed and to receive approval under provisions set forth in the regulations whereby preliminary approval was originally granted, or
 - (2) stipulate that the plat is null and void and that a new plat be presented subject to the provisions of these regulations.

In making this determination, the Planning Commission shall consider all pertinent facts available to it. The current state and active pursuit of construction and development activities within the subdivision shall be given due consideration in the course of the Planning Commission's deliberation on this question.

1-107 Repeal of Previous Regulations -- Upon the adoption and effective date of these regulations, the Subdivision Regulations of Smyrna, Tennessee, are hereby repealed.

1-108 <u>Amendments</u>

- 1-108.1 Enactment -- For the purpose of providing for the public health, safety, and general welfare the Planning Commission may from time to time amend these regulations. Before the adoption of any amendment to these regulations, a public hearing thereon shall be held by the Planning Commission, as required in Section 13-4-303 within Chapter 4, Title 13, Tennessee Code Annotated.
- 1-108.2 <u>Codification and Distribution</u> -- Subsequent to the adoption of any amendment to these regulations, such amendment shall be incorporated into the text of these regulations in the following manner:
 - (1) Replacement pages shall be prepared incorporating the new or changed language as shown in bold type. Each such new or replacement page shall have the amendment number and shall be dated so as to indicate the date of the last revision of the page.

1-109 <u>Enforcement, Violation, and Penalties</u>

1-109.1 General

1-109.101 <u>Authority</u> -- The enforcement of these regulations and the penalties for violations are provided pursuant to Title 13, Tennessee Code Annotated.

- 1-109.102 Enforcing Officer -- It shall be the duty of the Town Planner (hereinafter referred to as "the enforcing officer") to enforce these regulations and to bring to the attention of legal counsel any violations or lack of compliance herewith.
- 1-109.103

 Recording of Plats -- Pursuant to Section 13-4-302 Tennessee Code Annotated, no plat of a subdivision of land within the jurisdictional area shall be received or recorded by the county register until the plat has received final approval of the Planning Commission in accordance with these regulations, and such approval has been endorsed in writing on the plat by the Planning Commission secretary in the manner prescribed by Section 3-106 of these regulations. The subdivision of any lot or parcel of land by use of metes and bounds description without complying with the plat provisions of these regulations shall not be permitted. All such described subdivisions shall be subject to all of the requirements of these regulations.
- 1-109.104 <u>Use of Unapproved Plats</u> -- Pursuant to Sections 13-4-306, <u>Tennessee Code Annotated</u>, no owner, or agent of the owner of any land shall transfer, or sell, or agree to sell, or negotiate to sell such land by reference to or exhibition of, or by any other use of a plat of a subdivision of such land without first having submitted a plat of such subdivision to the Planning Commission and obtained its approval as required by these regulations and having recorded such plat in the office of the county register.
- 1-109.105

 Public Ways and Utilities -- Pursuant to Section 13-4-307, Tennessee Code Annotated, the governing body shall not nor shall any public authority accept, lay out, open, improve, grade, pave, or light any public way, lay or authorize the laying of water mains or sewers, or construct or authorize the construction of other facilities or utilities in any public way located within the jurisdictional area unless such way shall have been accepted, opened, or otherwise received the legal status of a public way prior to the attachment of the Planning Commission's jurisdiction, or unless such way corresponds in its location and lines to a way shown on a subdivision plat approved by the Planning Commission or on a public way plat made by the Planning Commission.

However, the governing body may override the Planning Commission by a majority vote of its entire membership as provided in Title 13, <u>Tennessee Code Annotated</u>.

In case of any state highway constructed or to be constructed within the jurisdictional area with state funds as a part of the state highway system, the submission to the Planning Commission shall be by the Tennessee Commissioner of Transportation, who shall have the power to overrule the disapproval of the Planning Commission.

1-109.106 <u>Building Permits</u> -- No building permit shall be issued for the construction of any building or structure located on a lot or plat

subdivided or sold in violation of any provision of these regulations.

1-109.107 Access to Lots by Public Way or Private Easement -- Pursuant to Section 13-4-308, Tennessee Code Annotated, no building permit shall be issued and no building or structure shall be erected on any lot within the jurisdictional area, unless the public way giving access to the lot upon which the building or structure is proposed to be placed shall have been accepted or opened or shall have otherwise received the legal status of a public way as provided by law.

Provided, however that when a permanent easement to a public street is used as access to a lot or tract of land being separated by plat from other property, such easement shall be at least 50 feet in width and shall not be used to provide access to more than one lot or tract of land.

The following standards shall apply to all permanent easements being used to provide access to one lot or tract of land:

- (1) easement shall not be legally used by more than two property owners.
- (2) no easement shall exceed 700 feet in length.
- (3) driveway on easement shall be constructed to minimize erosion or rapid deterioration.
- (4) the slope of the easement shall be kept to a maximum ten (10) percent grade and must be able to provide true access to the property.
- (5) maintenance of the easement shall be the responsibility of the property owners. the legal documents establishing the easement and ensuring maintenance of the easement shall be submitted with the final plat for review and approval, and shall be recorded with the final plat.
- (6) all required utility easements shall be located outside the 50 foot roadway easement.
- (7) any further subdividing on the easement shall require the development of a public road and meet all road standards and other requirements as stated in these regulations.

The above section shall not be construed to prohibit the development of buildings on lots or tracts with permanent access provided by private ways when such development is in the form of a planned development project and/or of condominium ownership of such private improvements which have been approved by the Planning Commission and will be in private ownership and control in perpetuity.

1-109.2 Penalties for Violations

- 1-109.201 Recording of Unapproved Plats -- Any county register receiving, filing, or recording a plat of a subdivision in violation of Section 1-109.103 of these regulations shall be deemed guilty of a misdemeanor, punishable as other misdemeanors as provided by law.
- 1-109.202 <u>Use of Unapproved Plats</u> -- Any owner or agent of the owner of any land who violates Section 1-109.103 of these regulations shall be deemed guilty of a misdemeanor, punishable as other misdemeanors as provided by law.
- 1-109.203 False Statements About Roads -- Any owner or agent of the owner of any land who makes false statements about the construction of roads to any prospective purchaser of real estate shall be deemed guilty of a misdemeanor, punishable as other misdemeanors as provided by law, pursuant to Section 13-3-410 of the Tennessee Code Annotated,
- 1-109.3 Civil Enforcement -- Appropriate actions and proceedings may be taken in equity to prevent any violation of these regulations, to prevent unlawful construction, to recover damages; to restrain, correct, or abate a violation, or to prevent illegal occupancy of a building, structure, or premise; these remedies shall be in addition to the penalties described in Section 1-110 of these regulations.

1-110 SPECIFIC STATUTORY REMEDIES

- 1-110.1 <u>Use of Unapproved Plats</u> -- The Town, through its attorney or other official designated by the Town Council may enjoin by action of injunction any transfer of, sale of, or agreement to sell any land in violation of these regulations.
- 1-110.2 <u>Erection of Unlawful Buildings</u> -- Where any building or structure is erected or being erected on any lot in violation of the road or permanent easement frontage requirements of these regulations, the enforcing officer or town attorney, or other official designated by the Town Council, may bring action to enjoin such erection, or cause the building or structure to be vacated or removed.
- 1-110.3 Enforcement of Financial Surety-- Where a surety instrument is accepted in lieu of completion of subdivision improvements and utilities as provided in these regulations, the Town may enforce such bond in the manner prescribed by Article 7 of these regulations, utilizing all appropriate legal and equitable remedies.

ARTICLE 2

DEFINITIONS

2-101 <u>Usage</u>

- (1) For the purpose of these regulations certain numbers, abbreviations, terms, and words used herein shall be used, interpreted, and defined as set forth in this article.
- (2) Unless the context clearly indicates to the contrary, words used in the present tense include the future tense and words used in the plural include the singular; the word "herein" means "in these regulations"; and the word "regulations" means "these regulations".
- (3) A "person" includes a corporation, a partnership, and an unincorporated association of persons, such as a club; "shall" is always mandatory; a "building" or "structure" includes any part thereof; "used" or "occupied", as applied to any land or building, shall be construed to include "intended, arranged, or designed to be used or occupied".

2-102 Words and Terms Defined

<u>Addenda</u> -- Written or graphic instruments issued prior to the execution of the Agreement which modify or interpret the contract documents, drawings, and specifications, by additions, deletions, clarification's or corrections.

<u>Alley</u> -- A public or private right-of-way primarily designed to serve as secondary access to the side or rear of those properties whose principal frontage is on some other street.

<u>Applicant</u> -- The owner of land proposed to be subdivided or his authorized representative. Consent shall be required from the legal owner of the property.

<u>Architect</u> -- An architect certified and registered by the State Board of Architectural and Engineer Examiners pursuant to Section 62-2-201 et seq, <u>Tennessee Code Annotated</u>, to practice in Tennessee; or a landscape architect certified and licensed by the State Board of Landscape Architects pursuant to Section 62-2-201 et seq, <u>Tennessee Code Annotated</u>, to practice in Tennessee.

<u>Arterial Street or Road</u> -- A major public way defined as an arterial street or road on the Major Thoroughfare Plan.

<u>Block</u> -- A tract of land bounded by public ways or by public parks, cemeteries, railroad rights-of-way, or shorelines or waterways or a combination of such.

<u>Bond</u> -- A type of surety or collateral including cash escrow or a letter of credit from a bank in Rutherford or Davidson County, Tennessee posted with the Town that guarantees specific performance.

<u>Builder's Permit Bond</u> -- A bond required of builders, contractors, or subcontractors, as appropriate, to cover any damage to required improvements resulting from construction activities.

<u>Building</u> -- Any structure built for the support shelter, or enclosure of persons, animals, chattels, or movable property of any kind; the term includes manufactured homes or mobile homes as defined in TCA 68-126-202, but does not include campers, recreational vehicles, semi-tractor trailers, temporary mobile construction offices, or other enclosed trailers.

<u>Building Official</u> -- Person designated by the Town Manager to enforce building codes.

<u>Capital Improvements Program</u> -- A proposed schedule of future projects, listed in order of construction priority, together with cost estimates and the anticipated means of financing each project. All major projects requiring the expenditure of public funds, over and above the annual local government operating expenses, for the purchase, construction, or replacement of the physical assets of the community are included.

<u>Channel</u> - That portion of a watercourse being the stream bed of any blue line stream shown on any U.S.G.S. Quadrangle Map, or any stream bed shown on any official FEMA flood map.

<u>Collector Street or Road</u> -- A major public way defined as a collector street or road in the Major Thoroughfare Plan.

<u>Common Elements</u> -- Any portion of a condominium which is held in common by owners of condominium units. These elements may be either general common elements or limited common elements, as defined below.

<u>General Common Elements</u> -- Any of the common elements of a condominium which are held in joint ownership by all owners of the condominium.

<u>Limited Common Elements</u> -- Any of the common elements of a condominium which are reserved for use by the owner of a particular condominium unit or group of units.

Comprehensive Plan -- A master plan or general plan for the jurisdiction corporate limits of the Town of Smyrna, as well as the urban growth boundary of the Town of Smyrna, which plan includes the Major Thoroughfare Plan and Land Use Plan, and which master plan has been adopted and approved by the Town of Smyrna Planning Commission and the Town Council, said document titled as Town of Smyrna Comprehensive Plan.

<u>Condominium</u> -- A form of ownership of less than the whole of a building or system of buildings under a statute which provides the mechanics and facilities for formal filing and recordation of divided interests in real property, whether the division is vertical or horizontal.

<u>Condominium Subdivision</u> -- The subdivision of property through the establishment of a condominium or horizontal property regime.

<u>Horizontal Condominium Subdivision</u> -- A condominium subdivision where each unit occupies some ground space.

<u>Vertical Condominium Subdivision</u> -- A condominium subdivision of a multi-story building in which one (1) or more units do not occupy ground area.

<u>Condominium Unit</u> -- A space conveyed by separate title and located within a condominium structure.

<u>Construction Plan</u> -- The maps or drawings accompanying a subdivision plat and showing the specific location and design of improvements to be installed in the subdivision in accordance with the requirements of the Planning Commission.

<u>Contractor</u> -- An individual, firm, or corporation that is licensed as a contractor in the State of Tennessee with whom an owner or authorized agent has executed a work agreement.

<u>Cul-de-sac</u> -- A minor street having only one outlet and having an appropriate terminal for the safe and convenient reversal of traffic movement; definition includes dead end, turn-around, or turn-about.

<u>Design Specifications</u> -- Written descriptions of a technical nature of materials, equipment, construction systems, standards, and workmanship required for a project intended for local government ownership or maintenance.

<u>Developer</u> -- The owner or authorized representative of land proposed to be subdivided or his authorized representative. Consent shall be required from the legal owner of the property.

<u>Director of Public Works</u> -- Person appointed by the Town Manager to assure compliance and specifications for roadway and drainage.

<u>Director of Utilities</u> -- Person appointed by the Town Manager designated to assure compliance with applicable standards and specifications for utilities.

<u>Dwelling Unit</u> -- A room, or rooms connected together constituting a separate, independent housekeeping establishment for owner occupancy, rental or lease on a daily, weekly, monthly, or longer basis; physically separated from any other room(s) or dwelling units which maybe in the same structure; and containing independent cooking and sleeping facilities.

<u>Easement</u> -- Authorization by a property owner for the use by another, for a specified purpose, of any designated part of his property. (See Section 1-109.107 for herein for standards pertaining to easements).

<u>Enforcing Officer</u> -- The Town Planner or such person designated by the Town Manger to be responsible for enforcing the provisions of these regulations.

<u>Engineer</u> -- An engineer licensed by the State Board of Architectural and Engineer Examiners pursuant to Section 62-2-201, <u>Tennessee Code Annotated</u>, to practice in Tennessee.

<u>Equal Degree of Encroachment</u> -- The delineation of floodway limits so that floodplain lands on both sides of a stream are capable to conveying a proportionate

share of 100-year flood flows. This is determined by considering the hydraulic conveyance of the floodplain along both sides of a stream for a significant reach.

<u>Escrow</u> -- A fiduciary agreement with the local government in lieu of actual performance and intended to assure performance. An escrow account may be provided as a bond subject to agreement of the governing body.

External Subdivision Boundary -- All points along the periphery of a subdivision.

<u>Final Subdivision Plat</u> -- The final map or drawing and accompanying materials, described in these regulations, on which the subdivider's plan of the subdivision is presented to the Planning Commission for approval and which, if approved by the commission, is recorded with the county register of deeds.

"Flood" or "Flooding" -- A general and temporary condition of partial or complete inundation of normally dry land areas from:

- 1. The overflow of inland or tidal waters;
- 2. The unusual and rapid accumulation or runoff of surface waters from any source.

<u>Flood Frequency</u> -- The statistically determined average for how often a specific flood level or discharge may be equaled or exceeded.

<u>Flood Fringe Area</u> -- That area of the floodplain lying outside the floodway but still lying within the area of special flood hazard, i.e., within the 100-year floodplain.

<u>Flood Hazard Boundary Map (FHBM)</u> -- An official map of a community, issued by the Federal Emergency Management Agency, where the boundaries of areas of special flood hazard have been designated as Zone A.

<u>Floodplain or Flood-Prone Area</u> -- Any land area susceptible to being inundated by water from any source (See "Flooding").

<u>Floodplain Management Program</u> -- The overall program of corrective and preventive measures for reducing flood damage, including but not limited to emergency preparedness plans, flood control works, and floodplain management regulations.

<u>Flood Profile</u> -- A graph showing the water-surface elevation or height or a particular flood event for any point along the longitudinal course of a stream. The flood profile is determined through the use of standard open-channel hydraulic calculations.

<u>Flood Proofing</u> -- Any combination of structural and nonstructural additions, changes, or adjustments to structures which reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures and their contents.

<u>Floodway</u> -- The channel or a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height.

<u>Floodway Encroachment Limits</u> -- The lines marking the limits of floodways on official federal, state, and local floodplain maps.

<u>Floodway Fringe</u> - The area adjoining a watercourse which, although not lying within a floodway, has been or may hereafter be covered by a 100-year flood.

<u>Frontage</u> -- That side of a lot abutting a public way ordinarily regarded as the front of the lot. It shall not be considered as the ordinary side of a corner lot.

Governmental Agency -- Any public body other than the governing body.

Governing Body -- The Town Council of the Town of Smyrna.

Governmental Representative -- An outside person or designated local official or employee authorized to act on behalf of the governing body in making determinations regarding legal, public works, planning, community development, or other public business.

Grade -- The slope of a public way specified in percentage terms.

<u>Highway, Limited Access</u> -- A freeway or expressway providing a traffic way for through traffic, in respect to which owners or occupants of abutting property(s) or lands and other persons have no legal right of access to or from the traffic way, except as such points and in such manner as may be determined by the public authority having jurisdiction over such traffic way.

<u>Horizontal Property Act</u> -- "The Tennessee Horizontal Property Act" as codified in Sections 64-2701 through 66-27-101 et seq., <u>Tennessee Code Annotated</u>.

<u>Individual Sewage Disposal System</u> -- A septic tank, seepage tile sewage disposal system, or any other sewage treatment device other than a public treatment system approved by the appropriate governmental representative.

<u>Internal Subdivision Boundary</u> -- All points within a subdivision which do not constitute external boundaries.

<u>Joint Ownership</u> -- Joint ownership among persons shall be construed as the same owner for the purpose of imposing subdivision regulations.

<u>Jurisdictional Area</u> -- Planning boundary(s) established in keeping with Sections 13-4-103, 13-4-201, and 13-4-303, <u>Tennessee Code Annotated</u>.

<u>Land Surveyor</u> -- A land surveyor certified and registered by the State Board of Land Survey Examiners pursuant to Section 62-18-103, <u>Tennessee Code Annotated</u>, to practice in Tennessee.

<u>Land Use Plan</u> -- An element of the master or comprehensive plan which sets out a plan or scheme of future land usage, which is the Town of Smyrna Land Use Plan.

<u>Letter of Credit</u> – A written guarantee from a financial institution guaranteeing the performance of the terms and conditions of a development approval.¹

<u>Lot</u> -- A tract, plot, or portion of a subdivision or parcel of land intended as a unit for the purpose, whether immediate or future, or transfer of ownership, or for building development.

Lot, Corner -- A lot situated at the intersection of two (2) public ways.

<u>Lot Improvements</u> -- Any building, structure, place, work of art, or other object or improvement of the land on which they are situated constituting a physical betterment of real property, or any part of such betterment.

<u>Low-Lying Land</u> - Any sink hole or depression at a lower elevation than the elevation of the drainage basin or 100 year floodplain.

<u>Major Street or Road</u> -- A public way which is classified as a collector or arterial public way in the Major Thoroughfare Plan.

Major Throroughfare Plan -- The plan adopted by the Planning Commission, pursuant to Section 13-4-302, Tennessee Code Annotated, and the Town Council showing, among other things, "the general location, character, and extent of public ways... (and) the removal, relocation, extension, widening, narrowing, vacating, abandonment or change of use of existing public ways...", which is the Town of Smyrna Major Thoroughfare Plan, included in the Town of Smyrna Comprehensive Plan.

<u>Major Subdivision</u> -- All subdivisions not classified as minor subdivisions including but not limited to subdivisions of five or more lots or subdivisions of any size requiring any new or improved road, the extension of government facilities, or the creation of any public improvements, or containing any floodprone area.

Minor Street or Road -- A public way which is not classified as an arterial or collector on the adopted Major Thoroughfare Plan.

Minor Subdivision -- Any subdivision containing either less than three (3) lots, or less than five (5) lots fronting on an existing public way; not involving any new or improved public way, the extension of public facilities, or the creation of any public improvements, and not in conflict with any provision of the adopted general plan, major street or road plan, and/or zoning ordinance, or these regulations.

National Flood Insurance Program -- A program established by the U.S. Government in the National Flood Insurance Act of 1968, and expanded in the Flood Disaster Protection Act of 1973, in order to provide flood insurance at rates made affordable through a federal subsidy in local political jurisdictions which adopt and enforce floodplain management programs meeting the requirements of the National Flood Insurance Program regulations. The program regulations are found at 44 Code of Federal Regulations, Chapter 1, Subchapter B.

<u>Neighborhood Collector Street or Road</u> – A public way which is not classified as an arterial or collector on the adopted Major Thoroughfare Plan but meets the criteria as established by these regulations.

Off-Site -- Any premise not located within the area of the property to be subdivided, whether or not in the same ownership of the applicant for subdivision approval.

One Hundred-Year Flood -- The flood having a one percent chance of being equaled or exceeded in any given year; also referred to as base flood.

Owner -- Any person, group of persons, firm or firms, corporation or corporations, or any other legal entity having legal title to or sufficient proprietary interest in the real property.

Performance Bond -- See "Bond".

<u>Perimeter Street</u> -- Any existing street to which the parcel of land to be subdivided abuts on only one side.

<u>Planning Commission</u> -- The Town of Smyrna Municipal Planning Commission as established pursuant to Title 13, Chapter 4, <u>Tennessee Code Annotated</u>, to execute a partial or full planning program within authorized area limits.

<u>Preliminary Plat</u> -- The preliminary drawing or drawings, described in these regulations, indicating the proposed manner of layout of the subdivision to be submitted to the Planning Commission for approval.

<u>Premise(s)</u> -- A tract of land together with any buildings or structures which may be thereon.

<u>Public Improvement</u> -- Any drainage ditch, roadway, parkway, sidewalk, pedestrian way, tree, lawn, off-street parking area, lot improvement, or other facility for which the local government may ultimately assume the responsibility for maintenance and operation or which may affect an improvement for which government responsibility is established.

<u>Public Way</u> -- Any publicly owned street, alley, sidewalk, or land right-of-way which provides for movement of pedestrians or vehicles.

<u>Reach</u> -- A hydraulic engineering term to describe longitudinal segments of a stream or river. A reach generally include the segment of the flood hazard area where flood heights are influenced by man-made area where flood or natural obstructions. In an urban area, the segment of a stream or river between two consecutive bridge crossings typically would constitute a reach.

Regulatory Flood -- The one hundred-year flood.

<u>Regulatory Flood Protection Elevation</u> -- The elevation of the regulatory flood plus one foot of freeboard to provide a safety factor.

<u>Resubdivision</u> -- A change in a map of any approved or recorded subdivision plat which alters the number of lots incorporated within the confines of the original plat, the street layout on such map or plat any area use thereon dedicated or reserved for public use, any lot line, or any required servicing public facility.

<u>Right-of-Way</u> -- A strip of land occupied or intended to be occupied by a public way crosswalk, railroad, electric transmission line, oil or gas pipeline, water main, sanitary or storm sewer line, or for another special use. The usage of the term "right-of-way", for land platting purposes, shall mean that every right-of-way hereafter established and shown on a final plat is to be separate and distinct from the lots or parcels adjoining such right-of-way and shall not be included within the dimensions or areas of such lots or parcels.

<u>Sale or Lease</u> -- Any immediate or future transfer of ownership, including contract of sale or transfer, of an interest in a subdivision or part thereof, whether by metes and bounds, deed, contract, plat, map, or other written instrument.

<u>Same Ownership</u> -- Ownership by the same person, corporation, firm, entity, partnership, or unincorporated association or ownership by different corporations, firms, partnerships, entities, or unincorporated associations, in which a stockholder, partner, associate, or a member of his family owns an interest in each corporation, firm, partnership, entity, or unincorporated association.

<u>Setback</u> -- The distance between a building wall and the nearest public way right-of-way.

Sketch Plat -- A sketch preparatory to the preliminary plat.

<u>Special Flood Hazard Map</u> -- The official map designated by the Federal Insurance Administrator to identify floodplain areas having special flood hazards.

<u>Start of Construction</u> -- For purposes of subdivision control any alteration of the original surface area of the land, from and after the date of adoption of these regulations.

<u>Structure</u> -- Anything constructed above or below ground.

<u>Subdivider</u> -- Any person who (1) having an interest in land, causes it, directly or indirectly, to be divided into a subdivision or who (2) directly or indirectly, sells, leases, or develops, or offers to sell, lease, or develop, or advertises for sale, lease, or development, any interest, lot parcel site, unit, or plot in a subdivision or who (3) engages, directly or indirectly, or through an agent in the business of selling, leasing, developing, or offering for sale, lease, or development a subdivision or any interest, lot parcel site, unit, or plot in a subdivision or who (4) is directly or indirectly controlled by or under direct or indirect common control with any of the foregoing.

<u>Subdivision</u> - The division of a tract or parcel of land into two (2) or more lots, sites, or other divisions requiring new street or utility construction, or any division of less than five (5) acres, 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 resubdividing or to the land or area subdivided. (See Section 13-4-301, <u>Tennessee Code Annotated</u>).

<u>Subdivision Agent</u> -- Any person who represents or acts for or on behalf of a subdivider or developer in selling, leasing, or developing or offering to sell, lease, or develop any interest, lot, parcel, unit, site, or plot in a subdivision, except in an instance where only legal counsel is provided.

<u>Substantial Improvement</u> -- Any repair, reconstruction, or improvement of a structure, the cost of which equals or exceeds fifty (50) percent of the actual cash value of the structure either before the improvement is begun or, if the structure has been damaged and is being restored, before the damage occurred. Substantial improvement begins when the first alteration of any structural part of the building commences.

<u>Temporary Improvement</u> -- Any improvement built and maintained by a subdivider during construction of the subdivision and prior to release of the surety for completion of required improvements.

<u>Town</u> -- Town of Smyrna, Tennessee.

<u>Town Attorney</u> -- The attorney holding the position of attorney for the town or such licensed attorney designated by the town attorney to furnish legal assistance for the administration of these regulations.

<u>Town Engineer</u> -- The Town Engineer of the Town or such professional engineer as may be appointed by the Town Council or Town Manager, as appropriate, to work on behalf of the Town.

<u>Town Planner</u> -- Person designated by the Town Manager designated to enforce zoning ordinances.

<u>Twenty-Five Year Flood</u> -- A flood having an average frequency of occurrence of once in 25 years.

<u>Watercourse</u> - Any stream shown on an official FEMA flood management map or any blue line stream shown on any U.S.G.S. quadrangle map or as determined by the Tennessee Department of Environment and Conservation.

<u>Water Surface Elevation</u> -- The height, in relation to the National Geodetic Vertical Datum (NGVD) of 1929, (or other datum, where specified) of floods of various magnitudes and frequencies in the floodplains of riverine areas.

<u>Water Quality Buffer Zone</u> – A strip of undisturbed native (indigenous) vegetation, either original or re-established, that borders streams and rivers, ponds and lakes, wetlands, and seeps; also known as a riparian zone.

Zoning Ordinance -- The Town of Smyrna Municipal Zoning Ordinance as adopted and as amended from time to time pursuant to Title 13, Chapters 7, <u>Tennessee Code Annotated</u>, for the purpose of regulating by district, land development or use for a designated area.

PROCEDURES FOR PLAT APPROVAL

3-101 Conditions² -- Regulation of the subdivision of land and the attachment of reasonable conditions to land subdivision are exercises of valid police power delegated by the state to the Planning Commission. The developer has the duty of compliance with reasonable conditions imposed by the Planning Commission for design, dedication, improvement, and restrictive use of the land so as to provide for the physical and economical development of the jurisdictional area and for the safety and general welfare of future plot owners in the subdivision and of the community at large.

3-102 General Procedure

- 3-102.1 <u>Plat Approval Requirements</u> -- Before any contract is executed for the sale of any portion of a parcel of land which is proposed to be subdivided and before any permit for the erection of any structure in a proposed subdivision shall be granted, the subdividing owner or his authorized agent shall apply for and secure the Planning Commission's approval of the proposed subdivision in accordance with the procedures of this article.
- 3-102.2 <u>Classification of Subdivisions</u> -- The Planning Commission shall classify each subdivision proposal as either major or minor as defined herein.
 - 3-102.201 <u>Review Procedure</u> -- The subdivider shall follow the procedure described below in order to secure plat approval
 - (1) Minor Subdivisions (See definition in Article 2)
 - (a) Pre-application conference with the enforcing officer including submittal of a scale drawing or survey of the proposed subdivision for preliminary discussion and review.
 - (b) Submittal of a final plat, either for review by the local planning staff, or the Planning Commission, as per the type of minor subdivision involved as defined in Article 2, prepared in accordance with the specifications in Section 4-104 herein.
 - (2) <u>Major Subdivision (See definition in Article 2)</u>³
 - (a) Pre-application conference on the subdivision with Town staff generally including a sketch plat, and discussion of the proposed area to be subdivided.
 - (b) Submittal of a sketch plat, prepared in accordance with Section 4-101 herein, for Planning Commission approval.

- (c) Submittal of the preliminary plat, prepared in accordance with Section 4-102 and Section 4-103 herein, for Planning Commission approval.
- (d) Securing of approval from other public agencies.
- (e) Submittal of construction plans, prepared in accordance with Section 4-103 herein, for approval by the Director of Public Works and the Director of Utilities.
- (f) Submittal of the final subdivision plat, prepared in accordance with Section 4-104 herein, for Planning Commission approval.
- 3-102.3 Official Submission Date -- For the purpose of these regulations, for both major and minor subdivisions, the date of the regular meeting of the Planning Commission at which the hearing on the final subdivision plat, including any adjourned date thereof, is closed, shall constitute the official submittal date of the plat at which the statutory period required in Section 13-4-304, Tennessee Code Annotated, for formal approval or disapproval of the plat shall commence.
- 3-102.4 Policy on Flood-prone Areas -- In determining the appropriateness of land subdivision at any site containing a flood-prone area, the Planning Commission, in reviewing any plat, shall consider the policy and purpose set forth in Section 1-104 of these regulations and, additionally:
 - (1) the danger to life and property due to the increased flood heights or velocities, either potential or actual, caused by subdivision fill, roads, and intended uses;
 - (2) the danger that intended uses or improvements may be swept onto other lands or downstream to the injury of others;
 - (3) the adequacy of proposed water supply, sanitation, and drainage systems, and the ability of these systems to function under flood conditions;
 - (4) the susceptibility of the proposed facility and its contents to flood damage and the effect of such damage upon the individual owner;
 - (5) the importance of the services provided by the proposed facility to the community at large;
 - (6) the requirements of the subdivision for a waterfront location;
 - (7) the availability of alternative locations not subject to flooding for the proposed subdivision and land uses;
 - (8) the compatibility of the proposed uses with existing development or development anticipated in the foreseeable future;

- (9) the relationship of the proposed subdivision to the land development plan and the floodplain management program for the area:
- (10) the safety of access to the property for emergency vehicles in times of flood;
- (11) the expected heights, duration, velocity, rate of rise, and sediment transport of the floodwaters expected at the site;
- (12) the costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems, public ways, and bridges; and
- (13) the effect of the proposed subdivision upon the governing body's participation in the National Flood Insurance Program, if such governing body is, or elects to be, in the program.
- (14) any grading in the flood plain area shall be utilizing on site material to off set fill and cut areas.

No subdivision or part thereof shall be approved by the Planning Commission if proposed subdivision levees, fills, structures, or other features will individually or collectively, increase flood flows, heights, duration, or damages. The regulatory limits (the one hundred-year flood level) shall be determined from the latest approved flood study for the jurisdictional area, and any subsequent revisions thereto. Specific engineering studies are to be formulated by the developer in those areas in which flood data are not currently available, if deemed necessary by the Planning Commission.

In any instance in which the Planning Commission determines that a proposed subdivision may affect the flood height, velocity, or duration in any flood-prone area outside its jurisdiction, the commission shall take all actions necessary and proper to ensure the coordinated review of the development with the appropriate governmental agencies of the affected area.

In approving plans for subdivision of land containing flood-prone areas, the Planning Commission shall ensure that development will proceed in such a way that property lying within any floodway, as defined by these regulations, will be maintained in a manner as prescribed by the Town of Smyrna Municipal Zoning Ordinance. The Planning Commission shall also ensure that development within any floodway fringe area (within the one hundred-year flood area) will be protected adequately against potential flood hazards by the methods prescribed in Article 5 of these regulations.⁴

The Planning Commission shall disapprove the subdivision of any land containing a flood-prone area when the commission determines that subdivision plans are not consistent with the policy stated in this section.

3-102.5 Special Provisions Governing Unit Ownership (Condominium) Subdivisions

3-102.501 General Provisions

- A. <u>Intent</u> -- This section is intended to augment the general legislation of Sections 66-27-101 through 66-27-123, <u>Tennessee Code Annotated</u>, entitled "Horizontal Property Act," by providing supplemental rules and regulations for the implementation of the act, as specifically authorized in Sections 66-27-121, <u>Tennessee Code Annotated</u>.
- B. Applicability -- Whenever a developer, the sole owner, or the co-owners of a building or buildings expressly declare through the submission of a master deed, lease, or plat their desire to submit their property to a regime, as established and provided by Sections 66-27-101 through 66-27-123, Tennessee Code Annotated, wherein there is established a horizontal property regime, each such condominium horizontal property regime created under the authority of these provisions for the purpose of sale or transfer of real property is subject to the provisions of these regulations.
- 3-102.502 <u>Submission of Plat Required</u> -- Prior to the sale or transfer of any property incorporated in the property regime, the developer, sole owner, or co-owners of such property shall submit to the Planning Commission a subdivision plat of such property in the manner prescribed by this article; such plat, if approved, shall be filed with the county register in the manner prescribed by this article.
- 3-102.503 <u>Determination of Subdivision Type</u> -- Condominium subdivisions shall be classified by the Planning Commission during the plat review process as either horizontal condominiums or vertical condominiums as defined in Article 2 of these regulations.
- 3-102.504 <u>Procedure</u> -- An applicant seeking approval of a condominium subdivision shall proceed through the normal procedure for subdivision approval, as set forth in this article.
- 3-102.505 Contents of Plans and Documents -- The plats, plans, and documents submitted by an applicant seeking approval of condominium subdivision shall conform to the specifications set forth in Article 4 of these regulations.

3-103 Sketch Plat⁵

3-103.1 Purpose of Sketch Plat -- The sketch plat is to be a concept plan for design purposes and should be used to discover all factors which may have an impact on the proposed development and to advise the subdivider of various possibilities before substantial amounts of time and money have been invested in a very detailed proposal which may contain elements contrary to these regulations.

- 3-103.2 <u>Application Procedure and Requirements</u> The applicant shall file with the Planning Commission a sketch plat. The failure of the applicant to satisfy the requirements of this section with full and correct information shall be cause for disapproval of the sketch plat. The sketch plat shall include the information set forth in Section 4-101and:
 - (1) be presented at the office of the Town Planner;
 - (2) include all land which the applicant proposes to be subdivided and all land immediately adjacent, extending one hundred (100) feet there from, or of that directly opposite thereto, extending one hundred (100) feet from the public way frontage of such opposite land. The lot pattern of surrounding development shall be shown within that area located within one hundred (100) feet of the proposed development;
 - (3) be accompanied by a minimum of ten (10) copies of the sketch plat as described herein;
 - (4) be presented to the Town Planner for the Planning Commission at least seventeen (17) days prior to a regular (officially opened) meeting of the Planning Commission. The Town Planner shall place the sketch plat on the agenda for the Planning Commission within 30 days of submittal by the applicant or at the next regular meeting of the Planning Commission after the 30 day period. The applicant may waive the time frame requirement for the appearance of the plat on the agenda;
 - (5) be accompanied by an administrative review fee as set by the Town Council.
- 3-103.3 Sketch Approval After the Planning Commission has reviewed the sketch plat, exhibits, and the results of administrative review, the applicant shall be advised of any required changes. The Planning Commission shall approve, conditionally approve, or disapprove the sketch plat within sixty (60) days after the date of the regular meeting of the Planning Commission at which the hearing on sketch approval, including adjourned date thereof, is closed. The applicant, however, may agree to an extension of the time for Planning Commission review.
- 3-103.4 <u>Approval of Sketch Plat</u> -- Approval of the plat shall constitute authorization to prepare detailed plans and specifications.
- 3-103.5 <u>Expiration of Approval</u> -- The approval of the sketch plat shall expire if no preliminary plat and construction plans are submitted and approved by the Planning Commission within one year of the date of the sketch plat approval.
- 3-104 Preliminary Plat and Construction Plans (Major Subdivisions Only)
 - 3-104.1 <u>Application Procedure and Requirements</u>⁶ -- The applicant shall file with the Planning Commission a preliminary plat. The failure of the applicant to satisfy the requirements of this section with full and correct information

shall be cause for disapproval of a preliminary plat. The preliminary plat shall be prepared in accordance with Section 4-102 and:

- (1) be presented at the office of the Town Planner;
- (2) include all land which the applicant proposes to be subdivided and all land immediately adjacent, extending one hundred (100) feet therefrom, or of that directly opposite thereto, extending one hundred (100) feet from the public way frontage of such opposite land. The lot pattern of surrounding development shall be shown within that area located within one hundred (100) feet of the proposed development;
- (3) be accompanied by a minimum of ten (10) copies of the preliminary plat as described herein;
- (4) be presented to the Town Planner for the Planning Commission at least seventeen (17) days prior to a regular (officially opened) meeting of the Planning Commission. The Town Planner shall place the preliminary plat on the agenda for the Planning Commission within 30 days of submittal by the applicant or at the next regular meeting of the Planning Commission after the 30 day period. The applicant may waive the time frame requirement for the appearance of the plat on the agenda;
- (5) be accompanied by an administrative review fee as set by the Town Council.
- 3-104.2 Administrative Review -- An administrative review meeting shall be conducted on the preliminary plat, construction plans, and any exhibits submitted in conformance with these regulations. This review shall include the technical review staff to the Planning Commission. The review shall be held prior to the regularly scheduled Planning Commission meeting at which the plat is to be reviewed. The findings of the review committee shall be presented to the Planning Commission.

With expert assistance, as necessary, the subdivider shall prepare a report, on any proposed subdivision containing or abutting a flood-prone area. In all cases, wherein a portion of a subdivision encroaches in an unmapped watercourse, a drainage easement shall be reserved on both sides of such channel extending five (5) times the width of said channel, unless a flood report as specified herein is approved by the Planning Commission requiring a lesser easement. Such report shall estimate the discharge of the regulatory flood; determine the specific flooding threat at the site of the proposed subdivisions; and indicate whether the subdivision is located in a floodway or floodway fringe area by:

(1) calculation of water surface elevations and regulatory flood protections based upon a hydraulic analysis of the capacity of the stream channel and overbank areas to convey the regulatory flood:

- (2) computation of the floodway required to convey the regulatory flood without increasing natural flood heights of the regulatory flood more than one foot at any point; and
- (3) unless otherwise established, computation of increases in flood heights caused by any encroachment shall be based upon the reasonable assumption that there will be an equal degree of encroachment on both sides of the stream within that reach. No increase in flood storage attributable to encroachments on the floodplain of any river or stream shall be permitted in any one reach or for the cumulative effect of several reaches.
- 3-104.3 <u>Notice of Hearing</u> -- The Planning Commission shall hold a hearing as required by Chapter 4 of Title 13, <u>Tennessee Code Annotated</u>, on each plat brought before it.
- 3-104.4 Preliminary Approval -- After the Planning Commission has reviewed the preliminary plat, exhibits, and the results of administrative review, the applicant shall be advised of any required changes. The Planning Commission shall approve, conditionally approve, or disapprove the preliminary plat within sixty (60) days after the date of the regular meeting of the Planning Commission at which the hearing on preliminary approval, including adjourned date thereof, is closed. The applicant, however, may agree to an extension of the time for Planning Commission review.

A certificate of preliminary approval shall be issued by the secretary of the Planning Commission, upon demand, and the applicant may proceed to apply for final subdivision plat approval in the manner prescribed by Section 3-105 of these regulations after approval of the construction plans by the Director of Public Works and Director of Utilities.

After the Planning Commission approves, conditionally approves, or disapproves the preliminary plat, one copy of the proposed preliminary plat shall be returned to the developer with the date of approval, conditional approval, or disapproval thereon. If a preliminary plat is disapproved the Planning Commission shall state specific reasons for disapproval which shall be entered into the minutes of the meeting.

Before the Planning Commission approves a preliminary plat showing land for any public use, the Planning Commission shall obtain approval for the land reservation from the governing body or appropriate governmental agency.

3-104.5 Effective Period of Preliminary Approval⁸ -- The approval of a preliminary plat shall be effective for a period of twelve (12) months, at the end of which time final approval of the subdivision plat must have been obtained from the Planning Commission, although the plat need not have been signed and filed with the county register. Any plat not receiving final approval within the period of time set forth herein shall be null and void, and the developer shall be required to submit a new plat for preliminary approval subject to the Town of Smyrna Municipal Zoning Ordinance and the subdivision regulations currently in effect.

3-104.6 Zoning Regulations⁹ -- Every plat shall conform to the Town of Smyrna Municipal Zoning Ordinance and subdivision regulations applicable at the time of proposed final approval, except that any plat which has received preliminary approval shall be exempt from any subsequent amendments to such zoning ordinance or these regulations rendering the plat nonconforming as to bulk, use, or development standards, provided, that final approval is obtained within the effective period of preliminary approval set forth in Section 3-104.5, herein.

3-105 Final Subdivision Plat (Minor and Major Subdivisions)

- 3-105.1 <u>Application Procedure and Requirements 10 -- A subdivider shall file with the Planning Commission a final plat.</u> The plat shall be prepared in accordance with Section 4-104 and:
 - (1) include the entire subdivision, or section thereof, for which final approval is sought;
 - (2) be accompanied by a minimum of ten (10) copies of the final subdivision plat as described herein;
 - (3) comply substantially with the preliminary plat, where such plat is required;
 - (4) be presented to the Town Planner for the Planning Commission at least seventeen (17) days prior to the regular meeting of the commission at which it is to be considered. The Town Planner shall place the final plat on the agenda for the Planning Commission within 30 days of submittal by the applicant or at the next regular meeting of the Planning Commission after the 30 day period. The applicant may waive the time frame requirement for the appearance of the plat on the agenda;
 - (5) be accompanied by formal irrevocable offers of dedication to the public of all public ways and uses, utilities, parks, and easements, in a form approved by legal counsel, as applicable. (The subdivision plat shall be marked with a notation indicating the formal offers of dedication as shown in Article 4 of these regulations.);
 - (6) be accompanied, if the final plat contains open space, or recreational facilities, or if any portion of the site is in common ownership, by the following documentation for approval by the Planning Commission:
 - (a) plans for improvement and maintenance of the open space or facilities located thereon;
 - (b) articles of incorporation and bylaws of the co-owners association or other legal entity (where open space or facilities are to be deeded to a co-owners association or similar organization acting on behalf of the joint owners of said property) charged with improving or maintaining the open space or facilities, and declaration of covenants and

- restrictions pertaining to each and every property within the subdivisions: and
- (c) declaration of covenants and restrictions pertaining to open space and facilities which assure the continued use of said facilities for the purpose intended, where open space or facilities are to be retained by the developer.
- (d) that any open-space that is being dedicated for public utilization comply with the requirements of 3-105.1(5) herein, as well as the submittal of documentation from the appropriate Town department or agency that the dedicated property and/or facilities are desirable for acceptance and maintenance. The Planning Commission shall make a recommendation to the governing body that the open-space and/or facilities be subsequently accepted.
- (7) be accompanied by an administrative review fee as set by the Town Council.
- 3-105.2 Endorsement of Notations -- The notations and certifications required by Section 4-104.3, of these regulations to appear upon the final plat shall be endorsed by appropriate officials and other persons prior to application for final subdivision plat approval, except that the certificate of Planning Commission approval shall be signed at the time specified in Section 3-106 of these regulations.
- 3-105.3 Notice of Hearing -- The Planning Commission shall hold a hearing as required by Chapter 4 of Title 13, Tennessee Code Annotated, on each plat brought before it.
- 3-105.4 Final Approval -- After the Planning Commission has reviewed the final plat, exhibits, and the results of administrative review, the applicant shall be advised of any required changes. The Planning Commission shall approve, conditionally approve, or disapprove the final plat within sixty (60) days after the date of the regular meeting of the Planning Commission at which the hearing on final approval, including adjourned date thereof, is closed. The applicant, however, may agree to an extension of the time for Planning Commission review.

A certificate of final approval shall be issued by the secretary of the Planning Commission, upon demand. After the Planning Commission approves, conditionally approves, or disapproves the final plat, one copy of the proposed final plat shall be returned to the developer with the date of approval, conditional approval, or disapproval thereon. If a final plat is disapproved the Planning Commission shall state specific reasons for disapproval which shall be entered into the minutes of the meeting.

Before the Planning Commission approves a final plat showing land for any public use, the Planning Commission shall obtain approval for the land reservation from the governing body or appropriate governmental agency.

- 3-105.5 <u>Vested Rights</u> -- No vested rights shall accrue to any plat by reason of preliminary or final approval until the actual signing of the plat by the secretary of the Planning Commission. All requirements, conditions, or regulations adopted by the Planning Commission, applicable to the particular subdivision or to all subdivisions generally, shall be deemed a condition of approval for any subdivision prior to the time of the signing of the final plat by the secretary of the Planning Commission. Where the Planning Commission has required the installation of improvements prior to the signing of the final plat, the Planning Commission shall not modify unreasonably the conditions set forth in the resolution of final approval.
- 3-105.6 Effective Period of Final Approval -- The approval of a final plat shall be effective for a period of twenty-four (24) months. At the end of twenty-four (24) months, the plat must either be signed by the Secretary of the Planning Commission and filed with the county register and/or a development agreement executed with the Town for the approved plat. If neither has been done, the final plat shall expire and become null and void, and the developer shall be required to submit a new plat for approval subject to the Town of Smyrna Municipal Zoning Ordinance and the subdivision regulations currently in effect.
- 3-105.7 Beginning of Construction -- No construction of the required public improvements shall begin on the subdivision until after approval of the final plat has been obtained from the Planning Commission, in addition to all other requirements of these regulations and all other appropriate Town, State, or federal laws and ordinances having been met. This provision shall not preclude a developer from obtaining a grading permit for the project provided all other applicable laws and ordinances are met.

3-106 Signing and Recording of Subdivision Plat¹¹

3-106.1 Signing of Plat

- (1) When a letter of credit is required, the secretary of the Planning Commission shall endorse approval on the plat after the letter of credit has been submitted and after all the conditions of the resolution pertaining to the plat have been satisfied.
- (2) When installation of improvements is required, the secretary of the Planning Commission shall endorse approval on the plat after all conditions of the resolution have been satisfied and all improvements satisfactorily completed. There shall be written evidence that the required public facilities have been installed in a manner satisfactory to the governing body as shown on certifications by the Director of Public Works, Town Engineer, and the Director of Utilities that necessary land dedications and improvements have been accomplished. To this effect, the owner/developer shall submit to the Town of Smyrna an "as-built" set of plans for any facility improvements approved under these regulations, prior to the issuance of said certifications.
- (3) When the conditions of this section are satisfied, the secretary shall sign the permanent reproducible original of the final plat.

- 3-106.2 Recording of Plat -- It shall be the responsibility of the subdivider to file the plat with the county register's office. Simultaneously, with the filing of the plat, the subdivider shall record the agreement of dedication together with such legal documents as shall be required to be recorded by legal counsel. The project applicant or subdivider shall pay all costs associated with the recordation of his or her respective final plat(s).
- 3-106.3 <u>Sectionalizing Major Subdivision Plats</u> -- Prior to granting final approval of a major subdivision plat, the Planning Commission may permit the plat to be divided into two (2) or more sections and may impose such conditions upon the filing of each section as it may deem necessary to assure the orderly development of the subdivision. Nevertheless, all approved final plats and sections thereof must comply with the requirements of Section 3-106.2 herein.

The Planning Commission may require that a letter of credit be in such amount as is commensurate with the section or sections of the plat to be filed and may defer the remaining required performance bond principal amount until the remaining sections of the plat are offered for filing. The developer also may file irrevocable offers to dedicate public ways and improvements in the section offered to be filed and defer filing offers of dedication for the remaining sections until such sections, subject to any conditions imposed by the Planning Commission, shall be granted concurrently with final approval of the plat. Such authorized sections must contain at least ten (10) percent of the total number of lots contained in the proposed plat unless a specific waiver of this requirement is granted by the Planning Commission.

3-107 Development Agreement 12

3-107.1 After approval of the preliminary plat by the Planning Commission and the construction plans by the Town Engineer, Director of Public Works, Director of Utilities, and any other required agency, a development agreement may be entered into between the subdivider and the Town. This agreement is required prior to the commencement of any development activity. This is required pursuant to the Town of Smyrna Municipal Code Title 14, Chapter 8.

3-108 Resubdivision of Land

- 3-108.1 Procedures for Resubdivision -- If any change in an approved or recorded subdivision plat would affect the layout of any public street, alley, or road (hereinafter referred to as public way) shown on such plat, or area reserved thereon for public use, or any lot line, or if it would affect any map, plan, or plat legally recorded before the adoption of any subdivision regulations, such amendment shall be approved by the Planning Commission by the same procedure, rules, and regulations as for a subdivision.
- 3-108.2 Procedures for Subdivision Where Future Resubdivision is Foreseen—Whenever a parcel of land is subdivided and the subdivision plat shows one or more lots containing more than one acre of land or double the minimum required area for any zoning district in which the lot is located, and the Planning Commission has reason to believe that any such lot(s) will be resubdivided into smaller buildings sites, the Planning

Commission may require that the subdivision and development of such parcel of land allow for the future opening of public ways and the ultimate extension of adjacent public ways. The Planning Commission may also require that dedications providing for the future opening and extension of such public ways be indicated on the plat.

3-109 Vacation of Plats -- Any plat or any part of any plat may be vacated by the owner of the premise, at any time before the sale of any lot described therein, by a written instrument, to which a copy of such plat shall be attached, declaring the plat or part of the plat to be vacated. The Planning Commission shall follow the same procedure for approval of such instrument as required for approval of plats. The governing body may reject any such instrument which abridges or destroys any public rights in any of its public uses, improvements, or public ways. Such an instrument shall be executed, acknowledged, or approved, and duly recorded or filed; the instrument shall operate to void the recorded plat and divest all public rights in the public ways and public grounds and all dedications laid out or described in such plat. When any lot or lots have been sold the plat may be vacated in the manner herein provided only if all the owners of lots in such platted area join in the execution of such writing.

3-110 Variances

- 3-110.1 <u>General</u> -- If the Planning Commission finds that extraordinary hardships or practical difficulties may result from strict compliance with these regulations, a variance from these regulations may be granted; provided, such variances shall not have the effect of nullifying the general intent and purpose of these regulations and provided, further, that the Planning Commission shall not recommend variations unless it shall make findings based upon written evidence presented to it in each specific case that:
 - (1) the granting of the variance will not be detrimental to the public safety, health, or welfare, or be injurious to other property or improvements in the neighborhood in which the property is located;
 - the conditions upon which the request for a variance is based are unique to the property for which the variance is sought and are not applicable generally to other property;
 - (3) because of the particular physical surroundings, shape, or topographical condition of the specific property involved, a particular hardship (not self-imposed) to the owner would result, as distinguished from a mere inconvenience, if the strict letter of these regulations were carried out; and
 - (4) the variance will not in any manner alter the provisions of the land development plan, the major street or road plan, or any zoning ordinance.

Where the Planning Commission concludes that the purpose of these regulations may be specifically served to an equal or greater extent by an alternative proposal, condition, or circumstance, it may approve other variations to these regulations.

- 3-110.2 Procedures -- A petition for any such variance shall be submitted in writing by the subdivider along with the initial filing of the plat. The petition shall state fully the grounds for the application and all of the facts upon which the petitioner is relying. In approving any variation from these regulations the Planning Commission shall state fully in the minutes the grounds for the variation and all of the facts upon which the decision is made.
- 3-110.3 <u>Conditions</u> -- In approving variations, the Planning Commission may impose such conditions as in its judgment will secure substantially the objectives, standards, and requirements of the regulations among these are the following:
 - (1) The Planning Commission shall not grant any variance within any floodplainany floodplain area unless the developer submits a study prepared by a registered professional engineer certifying that no increase in the 100 year flood level will result from the proposed development.
 - (2) Within flood prone areas variances shall only be issued upon a determination of the Planning Commission that the relief granted is the minimum necessary considering the flood potential hazard.

ARTICLE 4 SPECIFICATIONS FOR SUBMITTALS

4-101 Sketch Plat

- 4-101.1 <u>General</u> -- Sketch plats submitted to the Planning Commission shall be drawn to a convenient scale no smaller than one hundred (100) feet to an inch.
- 4-101.2 <u>Features</u> -- The sketch plat shall show:
 - (1) a scale drawing of the property and the names of the owners of adjoining property;
 - (2) size of the original tract(s) being subdivided;
 - (3) notation of any existing legal rights-of-way or easements, or other encumbrances affecting the property;
 - (4) approximate topography of the site, at no more than five (5) foot intervals, extended into adjacent properties;
 - (5) any areas which may be affected by flooding or located in the floodway or floodplain as determined by the most recent FEMA study;
 - (6) general public way and lot patterns;
 - (7) proposed phasing, if any;
 - (8) vicinity map of the property;
 - (9) date and approximate north point;
 - (10) name of owner, and documentation substantiating ownership as defined herein;
 - (11) name of plat designer;
 - (12) zoning classification; and
 - (13) concept for addressing water, sewer, and stormwater.

4-102 <u>Preliminary Plat</u>

- 4-102.1 <u>General</u> -- Ten (10) copies of the preliminary plat shall be prepared by an engineer licensed in the state of Tennessee, at a convenient scale no smaller than one hundred (100) feet to an inch. Sheets shall be numbered in sequence if more than one sheet is used.
- 4-102.2 Features -- The preliminary plat shall include:
 - (1) the location of the property to be subdivided with respect to surrounding property(s) and public way(s);

- (2) the names of all adjoining property owners of record, or the names of adjoining developments;
- (3) the names of adjoining public ways;
- (4) the location and dimensions of all boundary lines of the property, figured to the nearest hundredth of a foot;
- (5) the location of existing public ways, easements, water bodies, streams, topographic depressions, sinkholes, natural drainage features, and other pertinent features, such as swamps, railroads, buildings, parks, cemeteries, drainage ditches, and bridges, as determined by the Planning Commission;
- (6) the location and width of all existing and proposed easements, alleys, and other public ways, and building setback lines;
- (7) the location, dimension, and proposed area of all proposed or existing lots;
- (8) the position of all existing or proposed buildings within proposed condominium developments;
- (9) the location and dimension of all property proposed to be set aside for park or playground use or other public or private reservation, with designation of the purpose thereof, and conditions, if any, of the dedication or reservation;
- (10) the limits of floodway, the floodway elevation, and floodway fringe areas and the associated regulatory flood elevation as well as the required flood protection elevation;
- the name and address of the owner(s) of land to be subdivided, the subdivider if other than the owner, and the land surveyor or other person preparing the plat;
- the date of the plat, approximate true north point, scale, and title of the subdivision;
- (13) sufficient data to determine readily the general location, bearing, and length of all lines necessary to reproduce such lines within the area to be subdivided;
- name of the subdivision and all new public ways to be dedicated or constructed, as approved by the Planning Commission;
- the zoning classification of all zoned lots, as well as an indication of all uses other than residential proposed by the subdivider;
- the distance and bearing of one of the corners of the boundary of the subdivision to the nearest intersection of existing public ways

and to the original corner of the original survey of which it is a part;

- (17) key map showing relation of the subdivision to all public ways, railroads, and water courses in all directions to a distance of at least one-half mile (suggested scale: one inch to one thousand (1,000) feet);
- (18) contours at vertical intervals of not more than two (2) feet where the proposed subdivision has an average slope of five percent (5) or less, or at vertical intervals of not more than five (5) feet where the average slope exceeds five (5) percent (contours to be field surveyed or taken from aerial photographs acceptable to the Planning Commission);
- (19) tax map and parcel numbers as recorded on the tax maps of Rutherford County;
- (20) the location of all water and sewer lines, as well as the location of all existing and proposed fire hydrants; and
- (21) roadway lighting plans if underground electricity is proposed;
- (22) The following notations:
 - (a) explanation of drainage easements;
 - (b) explanation of site easements;
 - (c) explanation of reservations; and
 - (d) for any lot where public sewer or water systems are not available, the following:
 - (i) areas to be used for sewage disposal and their percolation results, or if the Planning Commission desires, any other acceptable data to show that the site can be served effectively by septic tanks;
 - (ii) water wells (existing and proposed); and
 - (iii) rock outcropping, marshes, springs, sinkholes, natural storm drains, and other outstanding topographical features;
- (23) plat shall contain the name and stamp of the engineer who prepared the plat; and
- (24) a form for endorsement of Planning Commission approval of the preliminary plat which shall read as follows:

Approved	by	the _			P	'lanı	ning
Commission	, with	such	exceptions	or			

indicated	in	the	minutes	of	the	Commission	on
	date		·				

Preliminary plat approval shall not constitute final approval for recording purposes.

4-103 Construction Plans

- 4-103.1 General -- Five (5) copies of construction plans shall be prepared for all improvements required by these regulations. Plans shall be drawn at a scale no smaller than one (1) inch equals fifty (50) feet. Plans shall be in compliance with the specifications in Article 4 of these regulations. Approval of plans must precede actual construction, and no final plat shall be considered by the Planning Commission until the required plans have been approved by the Director of Public Works and the Director of Utilities. The construction plans shall be prepared by a licensed engineer engaged in the practice of civil engineering.
- 4-103.2 <u>Features</u> -- The following shall be shown on the construction plans.
 - (1) Profiles showing existing and proposed elevations along center lines of all public ways.
 - (2) Where a proposed road intersects an existing public way or ways, the elevation along the center line of the existing public way within one hundred (100) feet of the intersection.
 - (3) Approximate radii of all curves, lengths of tangents, and central angles on all public ways.
 - (4) Proposed public ways, as required by the Planning Commission; where such are required, horizontal stationing shall be at fifty (50) foot intervals and cross-sectional elevations shall be to an accuracy of one tenth foot vertical on a line at right angles to the center line of the public way at the following points: the center line of the public way, each property line, and points twenty-five (25) feet inside each property line.
 - (5) Plans and profiles indicating the locations and typical crosssection of public way pavements, including curbs and gutters, sidewalks, drainage easements, rights-of-way, manholes, and catch basins.
 - (6) The location of public way signs.
 - (7) The location, size, and invert elevations of existing and proposed sanitary sewers, storm water drains, and fire hydrants, showing connection to any existing or proposed utility system.
 - (8) Exact location and size of all water, gas, or other underground utilities or structures.

- (9) Location, size, elevation, and other appropriate description of any existing facilities or utilities, including but not limited to, existing public ways, sewers, drains, water mains, easements, water bodies, streams, and other pertinent features, such as swamps, railroads, buildings, and features noted on the land development plan or major street or road plan. "As-built" plans for all facility improvements as required in Section 3-106.1(2) of these regulations must be prepared by the engineer of record on the subdivision of the improvements as constructed and approved by the Director of Public Works, and the Director of Utilities prior to the dedication and/or certification that all required infrastructure improvements are satisfactory to meet town standards.
- (10) The water elevations of adjoining lakes or streams and the approximate high- and low- water elevations of such lakes or streams shall be shown. All elevations shall be referred to the U.S.G.S. datum plane.
- (11) If the subdivision borders a lake, river, or stream, the distance and bearings of a meander line established not less than twenty (20) feet back from the ordinary high water mark of such waterways.
- (12) The developer shall prepare for any portion of a subdivision containing a flood prone area, or an area known to be subject to flooding, information necessary for the Planning Commission to determine the suitability of the particular site for the proposed development, as follows:
 - (a) plans drawn to scale showing the nature, location, dimensions, and elevation of any part of the subdivision within a flood prone area; existing or proposed structures or building sites, fill, storage of materials, and flood proofing measures, as specified in these regulations; and the relationship of the above to the location of the stream channel, floodway, floodway fringe, the regulatory flood elevation, and the regulatory flood protection elevation;
 - (b) a typical valley cross-section showing the channel of the stream, elevation of land areas adjoining each side of the channel, cross-sectional areas to be occupied by the proposed development, and high water information, if required by the Planning Commission;
 - (c) surface view plans showing elevations and contours of the ground;
 - (d) pertinent structures, fill or elevations of public ways;
 - (e) water supply, sanitary facilities, soil types, and other pertinent information, as required by the Planning Commission; and

- (f) specifications for building construction and materials, flood proofing, filling, dredging, grading, storage of materials, water supply, and sanitary facilities.
- (13) Contours at the same vertical interval as on the preliminary plat.
- (14) In addition to the other requirements of this section, construction plans for condominium subdivisions shall contain "as built" drawings of all underground utilities, regardless of proposed ownership, and the construction design of all public facilities which are proposed for dedication to the governing body.
- (15) A notation of construction plans approval by Director of Public Works and the Director of Utilities.
- (16) Title, name, address, and signature and stamp of the engineer who prepared the plans.
- (17) Date of plans, including any revision dates.
- (18) Tennessee Department of Environment and Conservation, public water and sewer design layout and approval stamps, if applicable; also, actual design plans for filing in appropriate governmental representative's office.

4-104 Final Subdivision Plat

4-104.1 General -- Ten (10) copies of the final subdivision plat shall be prepared on transparent drafting material at a scale no smaller than one hundred (100) feet to the inch, on sheets of county register plat book size. The use of an appropriate smaller scale may be permitted for lots larger than two acres. When more than one sheet is required, an index sheet of the same size shall be filed showing the entire subdivision with the sheets numbered in sequence.

Construction plans as described in Section 4-103 of these regulations, shall have been approved prior to Planning Commission approval of the final subdivision plat.

4-104.2 Features -- The final plat shall include:

- (1) The location of the property to be subdivided with respect to surrounding property(s) and public ways.
- (2) The names of all adjoining property owners of record or the names of adjoining developments.
- (3) The names of adjoining public ways.
- (4) The exact boundary lines of the tract, determined by a field survey, showing angles to the nearest minute and distance to the nearest one hundredth of a foot. The adjusted accuracy of the survey shall meet or exceed the standards set forth in Title 66, Chapter 6 of the <u>Tennessee Code Annotated</u>, for the category of

survey required by these regulations. The category of survey shall be determined according to the average size of lots (see Table below) within the proposed subdivision. The survey shall be tied into the Tennessee Grid Coordinate System.

ACCURACY OF SURVEYS

Average Lot Size

One (1) Acre or Less Greater than One (1) Acre but Less than Ten (10) Acres Ten (10) Acres or More

Unadjusted Accuracy

Category "I" Suburban Land Survey Category II" Rural Land Survey Category "III Farm Land Survey

A distance and bearing shall be provided which will link a point on the boundary of the subdivision to a permanent property marker in right-of-way of the nearest prominent public way intersection.

- (5) The location of all public ways, easements, water bodies, large streams or rivers, railroads, parks, and cemeteries.
- (6) The limits of floodway, the floodway elevation, and floodway fringe areas and the regulatory flood elevation.
- (7) The location and width of all easements and rights-of-way for public ways, as well as the building setback lines on all lots.
- (8) The location, dimensions, and area of all lots. All dimensions shall be field run to the nearest one hundredth of a foot and angles to the nearest second. Lot areas shall be shown to the nearest tenth of a square foot.
- (9) The location, area, and dimensions, to the accuracy set forth in Item 8 above, of all property to be set aside for park or playground use or other public or private reservation, with a designation of the purpose thereof, and conditions, if any, of the dedication or reservation.
- (10) The final plat of a condominium subdivision shall contain, in addition to the other information required by this section:
 - (a) an "as-built" building location and boundary survey, to "American Land Title Association" or other similar standards, showing complete and accurate dimensions and angles of the boundary of the parcel(s) on which the condominium is located, together with exterior dimensions and location relative to those boundaries of the building(s) which constitute the condominium subdivision;

- (b) some sort of datum plan or other suitable vertical location reference. In meeting these requirements, it is only necessary that the upper and lower limits of each level of each condominium unit be identified specifically in relation to the vertical reference (e.g., an appropriate permanent property marker or other acceptable reference datum or fixed known point). Elaborate exterior elevations and architectural detail are not necessary to satisfy this requirement; and
- (c) any other special information which the Planning Commission may require to protect the rights of future owners of the condominium or the public in general.
- (11) The name and address of the owner(s) of the land being subdivided.
- (12) The name and address of the subdivider if other than the owner.
- (13) The name, signature, and stamp of the land surveyor licensed in the State of Tennessee preparing the plat.
- (14) The date of the plat, approximate true north point, scale, and title of the subdivision.
- (15) Sufficient data to determine readily the location, bearing, and length of all lines necessary to reproduce such lines upon the ground. This shall include the radius, central angle, and tangent distance for the center line of the curved public ways and curved property lines that are not the boundary of curved public ways. The location of all permanent property markers and pins shall be indicated on the plat.
- (16) The names of all public ways.
- (17) The zoning classification of all lots, as well as an indication of uses other than residential proposed by the subdivider.
- (18) The total acreage within the subdivision.
- (19) Lot numbers, where required.
- (20) The line size and location of all existing and proposed water, sewer, and storm drainage facilities.
- (21) The location of all fire hydrants.
- (22) The diameter and length of all driveway culverts.
- (23) For any lot where public sewer or water system is not available, the following shall be shown:
 - (a) areas to be used for sewage disposal; and

- (b) water wells (existing and proposed).
- (c) water well disclaimer note if a well is utilized to service any platted lot. Such note must state that the lot in question may not be suitable for the utilization of a water well.
- (24) Certifications in the form reproduced in this section shall appear upon the final plat. All required certificates shall bear the signature of the approving or authorizing agent at the time of application for final plat approval, except that the form for endorsement of the Planning Commission's approval for recording shall appear unsigned at the time of application for approval.
- (25) Commitment note may be printed or stamped on the final plat reflecting location and dimension of easements, or extent of other agreements or factual data, in lieu of drafted illustration, when applicable, and as approved by the Planning Commission.
- (26) Traffic study prepared by a licensed traffic engineer, when required by the Director of Public Works and/or the Planning Commission.
- (27) The boundaries of detention basins, wetlands areas, and water quality buffer zones

4-104.3 Plat Certificates

(a) Certification showing that the applicant is the landowner; that he offers for dedication public ways, rights-of-way, and any site for public use; and that he consents to the subdivision plan.

CERTIFICATE OF OWNERSHIP AND DEDICATION

	n (we are) the owner(s) of the hereon, and that I (we) hereby
adopt this plan of subdivision wit the minimum building restrict	h my (our) free consent, establish ion lines, and that offers of
facilities have been filed as re-	public roads, utilities, and other quired by the Smyrna Municipal
Subdivision Regulations. Bo	ok Number, Page
Date	Owner
Title (if action for partnership or corporation	

	(b)	Certification by a registered land surveyor as to the accuracy of the land survey.			
		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 Smyrna, Tennessee, Municipal Planning Commission and that the permanent property markers have been or will be placed, as shown hereon, to the specifications of the Director of Public Works or his authorized representative.			
		Date Registered Engineer or Surveyor			
	(c)	Certification by appropriate governmental or quasi-governmental official(s) that sewage disposal and/or water system(s) has/have been installed.			
		CERTIFICATE OF APPROVAL OF UTILITY SYSTEMS			
		I hereby certify that the utility systems outlined or indicated on the final subdivision plat entitled have been installed or performance bonds posted in accordance with current local and state government requirements.			
		Sewer and Water System			
		Date Director of Utilities			
		CERTIFICATE OF APPROVAL OF PRIVATE SUBSURFACE SEWAGE DISPOSAL SYSTEM(S)			
Certification of General Approval for installation of S Sewage Disposal Systems with Restrictions.					
		General approval is hereby granted for lots proposed hereon as being suited for subsurface sewage disposal with the listed and/or attached restrictions.			
		Before the initiation of construction, the location of the house or other structure and plans for the subsurface sewage disposal system shall be approved by the local health authority.			
		, 20 Date Local Health Authority			
		Date Local Health Authority			

CERTIFICATE OF APPROVAL OF WATER SYSTEMS LOCATED IN THE SERVICE JURISDICTION OF CONSOLIDATED UTILITY DISTRICT OF RUTHERFORD COUNTY

	I hereby certify that the subdivision plat entitled has been approved				
	by the engineers for Consolidated Utility District and will be submitted and approved by the Tennessee Department of Environment and Conservation, Division of Water Supply when applicable.				
	. 20				
	Date Consolidated Utility District Official				
	Certification on the final plat by the Director of Public Works, Town Engineer, and the Director of Utilities that the subdivider has complied with one of the following.				
	(i) installation of all public way improvements in accordance with the requirements of these regulations; or				
	(ii) in lieu of compliance with subdivision improvement requirements, certification that surety instrument has been posted by the subdivider in an amount approved by the Director of Public Works to guarantee completion of all improvements.				
Please note that as applies to (i) and (ii) above the certificate as required in Section 3-106.1 are dependent upon submission of "as-built" plans as defined in Section 7-102.20 these regulations.					
	CERTIFICATE OF APPROVAL OF PUBLIC WAYS				
	I hereby certify: (1) that all designated public ways on this final subdivision plat have been installed in an acceptable manner and according to the specifications of the Smyrna, Tennessee Subdivision Regulations, or (2) that a performance bond or other surety has been posted with the Planning Commission to guarantee completion of all required improvements in case of default.				

Director of Public Works

(d)

Date

(e) For a subdivision containing common open space or facilities, certification on the final plat of dedication of common areas in accordance with procedures established in these regulations.

CERTIFICATION OF COMMON AREAS DEDICATION

of land shown here homeowners in Subdivision) for redescribed areas are but are dedicated to in Article	on as common creation and report dedicated the common use (Name of Subdite, "Declaration of State (Name of State)	elated activities. for use by the gense of the homeowner vision), as more fuand Restrictions" applies	use by the (Name of The above neral public, ers in order to corded with
, 20			
Date	Owner		
Certification on the recording of the plat	final plat of Pla	nning Commission a	approval for
CERTIFICAT	ION OF APPRO	OVAL FOR RECOR	DING
I hereby certify that found to comply Subdivision Regulation, as are noted in that it has been app Register.	with the Sr tions, with the the minutes of	nyrna, Tennessee exception of such v the Planning Comm	Municipal ariances, if nission, and
, 20			
Date	Secretary, Pla		

(f)

- (g) Notation of Possible Flooding -- If any portion of the land being subdivided is subject to flooding as defined in these regulations, a notation shall be made on the plat that development or modification of the land within any floodway delineated within plat is prohibited and that development within floodway fringes areas delineated on the plat shall be done in such a manner that any structure shall be protected against flood damage by fill, to at least the flood protection elevation, which elevation shall be stated in the notation. Any additional restrictions imposed by the Planning Commission upon development within flood-prone areas also shall be indicated on the plat.
- (h) Notation of Health Restrictions -- Any modifications or limitations which may be imposed by the Tennessee Department of Environment and Conservation shall be clearly indicated on the plat.

46

- (i) Notation of geotechnical requirements In all cases where potentially dangerous or damaging geological conditions such as sink holes are present within the boundaries of the subdivision or the platted lots therein as determined by the Director of Public Works, a notation shall be placed on the associated subdivision plat requiring a geotechnical report be prepared by a licensed professional prior to the issuance of a building permit on said lots.
- (j) Notation of traffic study preparation In all cases wherein the planning commission determines that the location and design of any proposed subdivision street accesses an existing town street, and the proposed design of this intersection is inadequate to meet the increased traffic requirements generated by the proposed subdivision or section of the subdivision in question, due to the number of lots therein, and/or due to the configuration or nature of the street system, a traffic study shall be prepared by a licensed traffic engineer, and a notation shall be placed on the final plat requiring the improvements and findings of said traffic study be implemented and constructed prior to final plat approval, or bonded as a part of the certificate of approval of public ways.
- (k) Notation of engineered footings In all cases wherein the planning commission determines that based on the presence of overly steep slopes and/or relatively unsuitable geological characteristics as pertain to the property being subdivided, engineered footings shall be required in such areas (on such lots) prior to the issuance of building permits thereon, and a notation shall be placed on the plat thereof. All such engineering footings shall be stamped and sealed by a registered engineer.

ARTICLE 5

REQUIREMENTS FOR IMPROVEMENTS, RESERVATIONS, AND DESIGN

5-101 General Requirements

- 5-101.1 <u>Conformance to Applicable Rules and Regulations</u> -- In addition to the requirements established herein, all subdivision plats shall comply with all applicable laws, ordinances, resolutions, rules, or regulations, including, but not limited to:
 - (1) all applicable provisions of Tennessee Law, regulations, or policy;
 - (2) the Town of Smyrna Muncipal Zoning Ordinance, any building and housing codes, and all other applicable laws or policies of the governing body;
 - (3) the adopted comprehensive plan, including the land use plan and the major road or street (public way) plan;
 - (4) the rules of the county health department and the Tennessee Department of Environment and Conservation;
 - (5) the rules, as applicable, of the Federal Highway Administration or Tennessee Department of Transportation, if the subdivision or any lot contained therein abuts a non-local highway; and
 - (6) the standards, ordinances, policies, and regulations adopted by all other boards, commissions, and agencies of the Town of Smyrna, where applicable.

Plat approval may be withheld if a subdivision is not in conformity with the above rules or with the provisions set forth in Section 1-104 of these regulations.

- 5-101.2 <u>Self-Imposed Restrictions</u> -- If the owner places restrictions on any of the land contained in the subdivision greater than those required by the Town of Smyrna Muncipal Zoning Ordinance or these regulations, such restrictions or reference thereto shall be recorded with the county register on a separate form, along with the final subdivision plat.
- 5-101.3 Permanent Property Markers -- The subdivider shall place permanent reference permanent property markers on the subdivision as required herein and as approved by a licensed surveyor. Permanent property markers shall be located and set as follows:
 - (1) Permanent property markers shall be located on public way rightof-way lines, at public way intersections, and sections, and at the beginning and ending points of curves. All permanent property markers shall be spaced so as to be within sight of each other.

- (2) The external boundaries of a subdivision shall be monumented in the field by permanent property markers, such as a surveyor's pin, which shall be securely embedded. These permanent property markers shall be placed not more than fourteen hundred (1,400) feet apart in any straight line and at all corners or breaks at each end of all curves, at the point where a curve changes its radius, at all angle points in any line, and at all angle points along a meander line, said points to be not less than twenty (20) feet back from the bank of any river or stream, except that when such corners or points fall within a public way or proposed future public way, the permanent property markers shall be placed on the side line of the public way.
- (3) All internal boundaries and those corners and points not referred to in the preceding paragraph shall be monumented in the field by like permanent property markers as described above. Such permanent property markers shall be placed at each end of all curves, at a point where a river changed its radius, and at all angle points in any line. All lot corners not following on any of the above described points shall be marked by iron rods, pipe, or pins at least eighteen (18) inches long and five-eighths (5/8) of an inch in diameter.
- (4) The lines of lots that extend to rivers or streams shall be monumented in the field by iron pins at least eighteen (18) inches long and five-eighths (5/8) of an inch in diameter or by round or square iron bars at least eighteen (18) inches long. Such pins shall be placed at the point of intersection of the river or stream and lot line, with a meander line established not less than twenty (20) feet back from the bank of the river or stream.
- (5) All permanent property markers and pins shall be properly set in the ground and approved by a surveyor or an engineer engaged in the practice of civil engineering prior to the time the Planning Commission approves of the final plat, or prior to the release of the bond where bond is made in lieu of improvements.
- (6) All such permanent property markers and pins shall be flush with the ground and planted in such a manner that they will not be dislodged easily.
- 5-101.4 Character of the Land -- Land which the Planning Commission finds to be unsuitable for subdivision or development due to flooding, improper drainage, steep slopes, rock formations, adverse earth formations or topography, utility easements, or other features which would be harmful to the safety, health, and general welfare of inhabitants of the land and surrounding areas shall not be subdivided or developed unless adequate methods are formulated by the developer and approved by the Planning Commission, upon recommendation of the Director of Public Works and/or Town Planner, to solve the problems created by the unsuitable land conditions. Such land shall be set aside for such uses as will not be endangered by any feature deemed by the Planning Commission to be harmful to the public health, safety, and general welfare.

Where protection against flood damage is necessary, in the opinion of the Planning Commission, flood-damage protection techniques may include, as deemed appropriate by the Planning Commission any or all of the following:

- (1) the imposition of any surety and deed restrictions enforceable by the Planning Commission to regulate the future type and design of uses within flood-prone areas;
- (2) flood-protection measures designed so as not to increase, either individually or collectively, flood flows, height, duration, or damages, and so as not to infringe upon the regulatory floodway;
- (3) installation of flood warning systems;
- (4) the use of fill, dikes, levees, and other protective measures; and
- (5) the use of flood-proofing measures, which may include:
 - (a) anchorage to resist flotation and lateral movement.
 - (b) accessory structures containing fully enclosed areas below the lowest floor that are subject to flooding shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or must meet or exceed the following minimum criteria: A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided. The bottom of all openings shall be no higher than one foot above grade. Openings may be equipped with screens, louvers, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.
 - (c) reinforcement of walls to resist water pressures.
 - (d) use of paints, membranes, or mortars to reduce seepage through walls.
 - (e) addition of mass or weight to structures to resist flotation.
 - (f) installation of pumps to lower water levels in structures.
 - (g) construction of water supply and waste treatment systems so as to prevent the entrance of or contamination of flood waters.
 - (h) installation of pumps or comparable facilities for subsurface drainage systems to relieve external foundation wall and basement flood pressures.

- (i) building design and construction to resist rupture or collapse caused by water pressure of floating debris.
- installation of valves or controls on sanitary and storm drains which permit the drains to be closed to prevent backup of sewage and storm water into buildings or structures.
- (k) location and installation of all electrical equipment, circuits, and appliances so that they are protected from inundation by the regulatory flood.
- (I) location of storage facilities for chemicals, explosives, buoyant material, flammable liquids, or other toxic materials which would be hazardous to the public health, safety, and welfare at or above the regulatory flood protection elevation, or design of such facilities to prevent flotation of storage containers or damage to storage containers which could result in the escape of toxic materials.

The acceptability of any flood-protection methods formulated by the subdivider or his agent shall be determined by the Planning Commission, as recommended by staff, which shall be guided by the policies set forth in Sections 1-104 and 3-102.4, of these regulations.

- 5-101.5 <u>Subdivision Name</u> -- The proposed name of the subdivision shall not duplicate or too closely approximate phonetically the name of any other subdivision in the area covered by these regulations. The Planning Commission shall have authority to designate the name of the subdivision which shall be determined at sketch or preliminary plat approval.
- 5-101.6 Street Signs, Property Numbering and Street Naming, and Traffic Control The Planning Commission shall have the authority to require developers constructing new streets or rights-of-way to install all needed Traffic Control Devices. The devices shall be at least the minimum design specified in the Tennessee Department of Transportation "Manual of Standard Traffic Control Devices." The Planning Commission may require the subdivider to prepare a traffic study as cited in Section 5-103.101 and referenced in Section 4-104.3(k) herein. Such study shall be prepared by a licensed traffic engineer to determine the need for additional traffic control devices and public way improvements. The installation of street name signs shall be by the Town of Smyrna, and the Town shall furnish the sign. Decorative sign posts and/or holders may be installed by the developer upon approval by the Director of Public Works. All street naming and property numbering shall be approved by the Town Planner and be in conformance with 911 requirements.

5-102 Lot Requirements

5-102.1 Lot Arrangement -- The lot arrangement shall be such that there will be no foreseeable difficulties, for reasons of topography, flood hazards, or other conditions in securing building permits to build on all lots in compliance with the Town of Smyrna Muncipal Zoning Ordinance and state and county public regulations and in providing driveway access to buildings on such lots from an approved public way. No subdivision plat shall be approved which contains any lot(s) which have not been approved for building site(s) by the Tennessee Department of Environment and Conservation, when applicable. In all cases, all platted lots must be shown as being buildable lots. Any lots that cannot be shown as buildable lots shall be noted, and long term maintenance and ownership shall be indicated on the final plat.

Where reasonably feasible, lot arrangement shall be such that building sites will afford maximum utilization of energy conservation measures such as providing for solar access purposes.

Where a lot in any flood-prone area must be improved to provide a building site free from flooding, such improvements shall be made outside the floodway and by elevation or fill to at least the regulatory flood protection elevation (one hundred-year flood) for a distance extending at least twenty-five (25) feet beyond the limits of all intended principal structures and, additionally, extending a sufficient distance to include areas for subsurface sewage disposal if the lot is not to be connected to a public sanitary sewer system. Any fill shall be in compliance with the Stormwater Management Ordinance.

In nonresidential building sites outside a floodway but subject to flooding, the use of structural flood-proofing methods specified in Section 5-101.4 of these regulations, as an alternative to landfill, may be approved by the Planning Commission, as provided in Section 3-102.4, of these regulations.

5-102.2 Lot Dimensions -- Lot dimensions shall comply with the minimum standards of the Town of Smyrna Muncipal Zoning Ordinance, where applicable. Where lots are more than double the minimum area required by the Town of Smyrna Muncipal Zoning Ordinance, the Planning Commission may require that such lots be arranged so as to allow further subdivision and the opening of future public ways where they would be necessary to serve such potential lots, all in compliance with the Town of Smyrna Muncipal Zoning Ordinance and these regulations. Where solar access is a primary consideration, side lot lines shall generally run from due north to due south, regardless of the resulting angle of incidence with a public way. A variation of up to twenty-five (25) degrees east or west of this axis is permitted; further variations may be allowed, but only to provide a better public way or lot

plan. Unless varied by the Planning Commission, side lot lines shall be at right angles to street lines (or radial to curving street lines). This rule shall not be varied unless a variation therefrom will produce a better street or lot plan.

Dimensions of the corner lots shall be large enough to allow for erection of buildings, observing the minimum front-yard setback requirements from both public way rights-of-way.

No lot when subdivided shall have a greater width to depth ratio than "one to five" (1:5); therefore, the average depth of the lot shall be no greater than five times the average width of said lot, with the exception of lots fronting cul-de-sac turn around areas, or lots five (5) acres or greater in size. Lots that front such cul-de-sacs shall have no greater width to depth ratios than "one to six: (1:6) as measured along the average widths to depths of said lots.

Depth and width of properties reserved or laid out for business, commercial, or industrial purposes shall be adequate to provide for the off-street parking and loading facilities required for the type of use and development contemplated, and as established in the Town of Smyrna Muncipal Zoning Ordinance.

5-102.4 <u>Double Frontage Lots and Access to Lots</u>

- 5-102.401 <u>Double Frontage Lots</u> -- Double frontage and reversed frontage lots shall be avoided except where necessary to provide separation of residential development from traffic arterials, or to overcome specific disadvantages of topography and orientation.
- Access from Arterial or Collector Public Ways -- The Planning Commission may require that lots shall not derive access exclusively from arterial or collector public ways. Where driveway access from such public ways may be necessary for several adjoining lots, the Planning Commission may require that the lots be served by a combined access drive in order to limit possible traffic hazards. Driveways shall be designed and arranged so as to avoid requiring vehicles to back onto arterial or collector public ways.

5-102.5 Soil Preservation, Grading, and Seeding

5-102.501 Soil Preservation and Final Grading -- No certificate of occupancy shall be issued until final grading has been completed in accordance with the approved construction plan of any subdivision.

Topsoil shall not be removed from residential lots or used as spoil, but shall be redistributed so as to provide cover on the lots, cover between any sidewalks and curbs, and be stabilized by seeding or planting. There shall be at least six (6) inches of topsoil cover (free of rock and debris) on the lots and at least four (4) inches of topsoil cover (free of rock and debris) between any sidewalks and curbs.

5-102.502 Lot Drainage -- Lots shall be laid out so as to provide positive drainage away from all buildings, and individual lot drainage shall be coordinated with the general storm drainage pattern for the area including subsurface drainage. Drainage shall be designed so as to avoid concentration of storm drainage water from each lot to adjacent lots.

The Planning Commission reserves the right to set minimum elevations on all floors, patios, and building equipment. This prerogative to establish elevation exists in addition to any ordinances that refer to floodplain elevation requirements. The content of the preceding paragraph is to give summary review powers over any calculated or historical evidence of storm water presence in overland or channel conditions.

The subdivision developer will ensure that all artesian ground waters of a permanent or temporary nature will be intercepted and carried away to primary drainage conduits along swaled ditches or in underground pipes on property line easements. Regardless of the location of property lines, intercept will be allowed by the Planning Commission at the point of artesian surfacing. The intent of this paragraph is to prevent flooding by overland flow. The developer is obligated to perform this work upon evidence of artesian water for a period of one (1) year following acceptance of all roads and utilities.

Any sinkhole or natural channel which serves at any time as a means of moving ground water into the subterranean will be protected by structure as approved by the Planning Commission, as well as by all rules promulgated by the Tennessee Department of Environment and Conservation. The allowed alternative to this is the construction of an alternative means of storm water relief as approved by the Planning Commission. In any event, location and elevation of future construction will be designated to allow for the worst possible conditions.

- 5-102.6 Debris and Waste -- No cut trees, timber, debris, junk, rubbish, or other waste materials of any kind shall be buried in any land or left or deposited on any lot or public way at the time of the issuance of a certificate of occupancy for the lot, and removal of such waste shall be required prior to issuance of any certificate of occupancy. Neither shall any such waste be left nor deposited in any area of the subdivision at the time of expiration of the performance bond or dedication of public improvements, whichever is sooner.
- 5-102.7 Lawn-grass Seed and Sod Lawn-grass seed shall be sown at not less than four (4) pounds to each one thousand (1,000) square feet of land area. In the spring, the seed shall be sown between March 15 and May 15, and in the fall, between August 15 and September 30. The seed shall consist of a maximum of ten (10) percent rye grass by weight and minimum of ninety (90) percent of permanent bluegrass or fescue grass by weight. All seed shall have been tested for germination within one (1) year of the date of seeding, and the date of testing shall be on the label

containing the seed analysis. All lots shall be seeded from the roadside edge of the unpaved right of way back to a distance of twenty-five (25) feet behind the site of the principal residence on the lot. No certificate of occupancy shall be issued until re-spreading of soil and seeding of lawn has been completed, except that between October 1 and March 15 and between May 15 and August 15, the applicant shall submit cash in an amount to be determined by the Town Planner to ensure that respreading of soil and seeding of lawn will be done during the immediately following planting season as set forth in this section, and leave a cash escrow for performance in such amount as shall be determined by the Director of Public Works and submitted to the Town Planner. Sod may be used to comply with any requirement of seeding set forth herein.

- 5-102.8 Fencing -- Each subdivider or developer shall be required to furnish and install all fences wherever the Planning Commission determines that it is necessary due to hazardous conditions or other considerations. Such fences shall be constructed according to standards established by the Planning Commission, as appropriate, and shall be noted on the final plat as to height and required materials. No certificate of occupancy shall be issued for any affected lot until such fence improvements have been installed.
- 5-102.9 Water Bodies and Watercourses -- If a tract being subdivided contains a water body, or portion thereof, lot lines shall be so drawn as to distribute the entire ownership of the water body among the adjacent lots. The Planning Commission may approve an alternative plan whereby the ownership of and responsibility for safe maintenance of the water body is so placed that it will not become a governmental responsibility.

No more than ten (10) percent of the minimum area of a lot required under the Smyrna Muncipal Zoning Ordinance may be satisfied by land which is under water. For the purpose of this ordinance under water shall be defined as any area shown on FEMA flood maps as being within a designated floodway, or any permanent body of water. Where a watercourse separates a buildable area of a lot from the public way by which it has access, provisions shall be made for installation of culvert or other structure approved by the Planning Commission and no certificate of occupancy shall be issued for a structure on such a lot until the installation is completed and approved by the Planning Commission and/or the appropriate governmental representative.

5-103 Public Ways

5-103.1 General Requirements

5-103.101 Frontage on Improved Public Ways -- No subdivision shall be approved unless the area to be subdivided shall have frontage on and access from either an existing public road (except as provided in Section 1-109.107 of these regulations) or, if any new street construction or improvement is involved, a street approved and dedicated as provided in Articles 3 and 7 of these regulations. Any such public way must be suitably improved to the standards required by this article or be bonded by a performance bond

required under these regulations, with the roadway and right-of-way widths required by this article or the major street or road plan.

If on the advice of the Director of Public Works there are potential safety hazards associated with the public way entrance into any proposed subdivision, it shall be the responsibility of the subdivider to have a traffic study prepared for such entrance and submitted to the Planning Commission for analysis prior to the consideration of the final plat. Such study shall be prepared by a registered engineer. The findings of said study may be required to be incorporated into the final plat.

- 5-103.102 Grading and Improvement Plan -- Public ways shall be graded and improved to conform to the standards required by this section and shall be approved as to design and specification by the appropriate governmental representative in accordance with the specifications required herein. No surface shall be applied to the base of any proposed public way prior to the approval of the final plat of the subdivision or of the final approval of any section of the subdivision in question without having been properly inspected.
- 5-103.103 Improvements in Floodable Areas -- The finished elevation of proposed public ways subject to flood shall be no less than the regulatory flood protection elevation. The Planning Commission may require profiles and elevations of public ways to determine compliance with this requirement. All drainage structures shall be sufficient to discharge flood flows without increasing flood height. Where fill is used to bring the finished elevation of any public way to the required elevation, such fill shall not encroach upon a floodway, and the fill shall be protected against erosion by rip-rap, vegetative cover, or other methods deemed acceptable in the Stormwater Management Ordinance.

5-103.104 Topography and Arrangement

- All public ways shall be arranged so as to obtain as many of the building sites as possible at or above the grades of the public ways. Grades of public ways shall conform as closely as possible to the original topography. A combination of steep grades and curves shall not be permitted. Specific design standards are contained in Section 5-103.2 of these regulations.
- (2) The use of public ways running in an east-west direction and lots on a north-south axis is encouraged for energy conservation of developments.
- (3) All public ways shall be properly integrated with the existing and proposed system of public ways and dedicated rights-of-way as established in the Major Thoroughfare Plan or the Land Use Plan.
- (4) All public ways shall be properly related to special traffic generators, such as industries, business districts, schools,

56

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

5-103.105 Blocks

- (1) Blocks shall have sufficient width to provide for two (2) tiers of lots of appropriate depth. Exceptions to this prescribed block width may be permitted in blocks adjacent to major public ways, railroads, or waterways.
- (2) The lengths, widths, and shapes of blocks shall be determined with due regard to:
 - (a) provisions of adequate building sites suitable to the special needs of the type of use contemplated;
 - (b) the Town of Smyrna Municipal Zoning Ordinance as to lot sizes and dimensions;
 - (c) needs for convenient access, circulation, control, and safety of vehicular and pedestrian traffic; and
 - (d) limitations and opportunities of topography.
- (3) Block lengths in residential areas shall not exceed sixteen hundred (1,600) feet nor be less than two hundred (200) feet, except as the Planning Commission deems necessary

to secure efficient use of land or desired features of the public way pattern. Wherever practicable, blocks along arterial or collector routes shall not be less than one thousand (1,000) feet in length.

- (4) Blocks designed for industrial or commercial uses shall be of such length and width as may be deemed suitable by the Planning Commission.
- (5) In any long block, the Planning Commission may require the reservation of an easement through the block to accommodate utilities, drainage, facilities, and/or pedestrian traffic.

A pedestrian walkway, not less than ten (10) feet wide, may be required by the Planning Commission through the appropriate center of any block more than eight hundred (800) feet long, where deemed essential to provide circulation or access to a school, playground, shopping center, transportation facility, or other community facility.

- 5-103.106 Access to Arterials and Collectors -- Where a subdivision borders on or contains an existing or proposed arterial or collector route, the Planning Commission shall require that access to such public way be limited such that:
 - (1) the subdivision of lots backing onto arterial routes shall not be approved, and the subdivision of lots backing onto collector routes shall be discouraged;
 - (2) a series of cul-de-sac, "U" shaped public ways, or short loops entered from and designed generally at right angles to such a parallel public way, with the rear lines of their terminal lots backing into the arterial or collector route shall be utilized: or
 - (3) a marginal access road or public way frontage road, separated from the arterial or collector route by a planting or grass strip and having access thereto at suitable points be utilized.

The number of residential or local public ways entering on arterial or collector routes shall be kept to a minimum.

5-103.107 Reserve Strips -- The creation of reserve strips adjacent to a proposed public way in such a manner as to deny access from adjacent property to such public way shall generally not be permitted.

However, in extraordinary circumstances the Planning Commission may allow creation of a reserve strip to enable a more appropriate pattern of lots or public ways. Where such is created the Planning Commission must agree to any and all future dispositions of same. A notation to this effect shall be entered on

the final plat or approved as an auxiliary instrument attached thereto.

5-103.108 Arrangement of Continuing and Dead-end Public Ways

Α. Arrangement of Continuing Public Ways The arrangement of public ways shall provide for the continuation of major public ways between adjacent properties when such continuation is necessary for convenient movement of traffic, effective fire protection, efficient provision of utilities, and when such continuation is in accordance with the Major Thoroughfare Plan. If the adjacent property is undeveloped and the public way must be a dead-end public way temporarily, the right-of-way shall be extended to the property line. A temporary cul-de-sac turnabout shall be provided on all temporary dead-end public ways as required in the following turnabout standards, with a notation on the subdivision plat that land outside the normal public way right-of-way shall revert to abutting property owners whenever the public way is continued.

The Planning Commission may limit the length of temporary dead-end public ways in accordance with the design standards of these regulations.

B. <u>Dead-End Public Ways</u> -- Where a public way does not extend beyond the boundary of the subdivision and its continuation is not required by the Planning Commission for access to adjoining property, its terminus shall normally not be nearer to such boundary than fifty (50) feet. However, the Planning Commission may require the reservation of an appropriate easement to accommodate drainage facilities, pedestrian traffic, or utilities. A cul-de-sac turnabout shall be provided at the end of a dead-end public way in accordance with the design standards of these regulations.

For greater convenience to traffic and more effective police and fire protection, permanent dead-end public ways shall, in general, be limited in length in accordance with the design standards of these regulations.

5-103.109 Construction Access Ways

Every effort shall be made by subdivision developers and contractors to utilize temporary, alternative construction entrances in accordance with all Smyrna Municipal Ordinances and Tennessee Department of the Environment and Conservation regulations. Such access ways shall be exclusive of any public way(s) serving such subdivision(s). All vehicles involved in the development and construction of the respective subdivision(s) shall enter and exit such subdivision(s) strictly by way of the designated construction entrance(s). It shall be the responsibility of the Planning Commission to designate the location and number of such construction access route(s) serving said subdivision(s). Furthermore, it shall be the prerogative of the Planning Commission to decide which subdivision(s) will be required to utilize separate construction entrances. Such entrance(s) shall be specifically located on all preliminary plats and identified as such. The establishment and utilization of construction access ways does not in any way exempt the subdivision owner/developer from the posting of maintenance bonds or letters of credit as stipulated in Section 7-103 of these regulations. If temporary alternative construction entrances are not utilized or are not feasible, a maintenance letter of credit will be required to be posted prior to the recording of the final plat.

Wherever access ways for construction vehicles intersect paved public roads, provisions must be made to minimize the transport of sediment (mud) by runoff or vehicles tracking onto paved surface by clearing the area at the entrance of all vegetation, roots, and other objectionable material and placing a gravel layer at least 6-inches thick for a minimum of fifty (50) feet from the edge of the hard surface public road. Construction entrances shall be constructed in accordance with all Smyrna Muncipal Ordinances and Tennessee Department of the Environment and Conservation regulations. The Town of Smyrna Department of Public Works may order additional protective and remedial measures as deemed necessary. Where sediment is transported onto a public road surface, the roads shall be cleaned thoroughly at the end of each day or more often if deemed necessary. Sediment shall be removed from roads by shoveling or sweeping and be transported to a sediment-controlled disposal area. Street washing shall be allowed only after sediment is removed in this manner.

5-103.2 Design Standards

5-103.201 Purpose -- In order to provide public ways of suitable location, width, and improvement to accommodate prospective traffic and afford satisfactory access to police, fire-fighting, sanitation, and road-maintenance equipment, and to coordinate public ways so as to compose a convenient and safe system and avoid undue hardships to adjoining properties, the public way design standards set forth in this section are hereby required. (Public way

classification shall be as indicated on the Major Thoroughfare Plan otherwise, the public way shall be classified by the Planning Commission according to the definitions in Article 2 of these regulations.)

5-103.202 <u>General Design</u> -- The general design of all public ways shall conform to the standards in the table on the following pages.

5-103.203 Intersections

- (1) Public ways shall intersect at right angles unless specifically approved by the Planning Commission. A proposed intersection of two (2) new public ways at an angle of less than seventy-five (75) degrees shall not be permitted. An oblique public way should be curved approaching an intersection and should be approximately at right angles for at least one hundred (100) feet therefrom. Not more than two (2) public ways shall intersect at any one point unless specifically approved by the Planning Commission.
- (2) Proposed new intersections along one side of an existing public way shall coincide, wherever practicable, with any existing intersections on the opposite side of such public way. Jogs within public ways having center line offsets of less than one hundred fifty (150) feet shall not be permitted except where the intersected public ways have separated dual drives without median breaks at either intersection. Where public ways intersect arterial or collector routes, their alignment shall be continuous. Intersections of arterial or collector public ways shall be at least one thousand (1,000) feet apart.
- (3) Minimum curb radius at the intersection of two (2) minor public ways shall be twenty-five (25) feet, and minimum curb radius at an intersection involving a collector public way shall be thirty (30) feet. Alley intersections and abrupt changes in alignment within a block shall have the corners cut off in accordance with standard engineering practice to permit safe vehicular movement.
- (4) Where a public way intersection will involve earth banks or existing vegetation inside any lot corner that would create a traffic hazard by limiting visibility, the subdivider shall cut such ground or vegetation (including trees) in connection with the grading of the public right-of-way to the extent necessary to provide adequate site distance.
- (5) Intersections shall be designed with a flat grade wherever practical. In hilly or rolling areas, at the approach to an intersection, a leveling area shall be provided having not greater than a two (2) percent grade for a distance of sixty (60) feet, measured from the nearest right-of-way line of the intersecting public way.

- (6) The cross-slope on all public ways, including intersections, shall be three (3) percent or less.
- 5-103.204 Excess Right-of-Way -- A slope easement in excess of the right-of-way designated in these regulations may be required whenever, due to topography, additional width is necessary to provide adequate earth slopes. Such slopes shall not be less than three (3) to one (1).
- 5-103.205 Railroads and Limited Access Highways -- Railroad rights-of-way and limited access highways, where so located as to affect the subdivision of adjoining lands, shall be treated as follows:
 - (1) In residential areas, a buffer strip at least twenty-five (25) feet in depth in addition to the normally required depth of the lot may be required adjacent to the railroad right-of-way or limited access highway. This strip shall be part of the platted lots and shall be designated on the plat: "This strip is reserved for screening; the placement of structures hereon is prohibited."
 - (2) In commercial or industrial areas, the nearest public way extending parallel or approximately parallel to the railroad shall, wherever practicable, be at a sufficient distance therefrom to ensure suitable depth for commercial or industrial sites.
 - (3) Public ways parallel to a railroad, when intersecting a public way which crosses the railroad at grade, shall to the extent practicable, be at a distance of at least one hundred fifty (150) feet from the railroad right-of-way. Such distance shall be determined with due consideration of the minimum distance required for future separation of grades by means of appropriate approach gradients.

GENERAL DESIGN STANDARDS FOR PUBLIC WAYS

IMPROVEMENT	RESIDENTIAL PUBLIC WAY	NONRESIDENTIAL PUBLIC WAY (INDUSTRIAL, COM- MERCIAL: OTHER)
Minimum Right-of-Way W	/idth (In Feet)	
Neighborhood Minor	50	N/A
Minor	N/A	50
Neighborhood Collector	50	N/A
Collector	60	60
Arterial (2 lane)	80	80
Arterial (3 lane)	80	80
Arterial (4 lane)	90	92
Arterial (5 lane)	105	105

Minimum Width of Roadway or Paved Area (In Feet) Not Including Parking Requirements

Neighborhood Minor	22	N/A
Minor	N/A	28
Neighborhood Collector	24	N/A
Collector	24 *	30
Arterial (2 lane)	28 *	28*
Arterial (3 lane)	36*	36*
Arterial (4 lane)	48*	48*
Arterial (5 lane)	60*	60*

Storm gutter width shall not be included as part of the roadway width requirement.

Maximum Percentage Grade

Neighborhood Minor	- 10	N/A
Minor	N/A	8
Neighborhood Collector	10	N/A
Collector	8	6
Arterial	6	5

Pavement Crown

The paved surface shall have a crown of 2 percent slope from center line to the edge of pavement (or as otherwise specified by the Director of Public Works).

N	1inimum	Center	Line Radiu	s of Curve	(In Feet)**
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Neighborhood Minor	200	N/A
Minor	N/A	300
Neighborhood Collector	200	N/A
Collector	300	400
Arterial	500	600

Or greater as determined by the Director of Public Works. Or greater as approved by the Director of Public Works based on design speed.

PUBLIC WAY

Minimum Length of Vertical Curves

Minor 100 feet, but not less than 28 feet for crest curve and 35 feet

for sag curve for each algebraic difference in grade.

Neighborhood Collector 100 feet, but not less than 28 feet for crest curve and 35 feet for sag

curve for each algebraic difference in grade

Collector 100 feet, but not less than 55 feet for crest curve and 55

feet for sag curve for each algebraic difference in grade.

Arterial 300 feet, but not less than 85 feet for crest curve and 75

feet for sag curve for each algebraic difference in grade.

Minimum Length of Tangents Between Reverse Curves (In Feet)

Minor	100	200
Neighborhood Collector	100	N/A
Collector	100	200
Arterial	300	400

Minimum Sight Distance (In Feet)*

Minor	200	250
Neighborhood Collector	200	N/A
Collector	240	250
Arterial	300	400
Intersection	Across Corners	Across Corners
	75 feet back	75 feet back

Minimum Turn around on Cul-de-sacs on Minor Public Ways (In Feet)

Right-of-way

Diameter 100 160
Pavement Diameter 80 140

Length of Cul-de-sac

Permanent Serving no more than 16 dwelling units and not exceeding 1,000 feet in length.

Temporary Serving no more than 26 dwelling units

and not exceeding 1,500 feet in length.

64

The sight distance is measured from a point 3.75 feet above the center line of the roadway surface to a point 6 inches above the center line of the roadway surface.

Minimum Radii (In Feet) of Return at Intersections

At right-of-way	25	30
At Pavement	30	55

5-103.206 Bridges -- Bridges of primary benefit to the subdivider, as determined by the Town Council, shall be constructed at the full expense of the subdivider without reimbursement from the governing body. The sharing of expenses for the construction of bridges not of primary benefit to the subdivider, as determined by the Town Council, shall be fixed by special agreement between the governing body and the subdivider. The cost shall be charged to the subdivider pro rata as to the percentage of his development so served.

5-103.207 <u>Neighborhood Collectors</u> -- Neighborhood collector public ways as defined by these Regulations must meet at least one of the following criteria:

- (1) The street connects to an existing public way perpendicular to the existing public way;
- (2) The street connects to adjoining undeveloped property;
- (3) The street connects two or more subdivisions together;
- (4) The street serves 26 or more dwelling units or is over 1,500 feet in length;
- (5) There are more than two minor streets that connect to it.

Such public ways shall be designated by the Planning Commission upon review of the sketch plat for a new subdivision.

- 5-103.3 Right-of-way Width Dedication on Existing Public Ways -- Where a subdivision adjoins an existing narrow public way or where the major street or road plan or any zoning setback provisions indicate plans for realignment or widening of a public way that would require use of some of the land in the subdivision, the subdivider shall be required to dedicate, at his expense, areas for widening or realigning such public way as set forth below:
 - (1) the entire right-of-way shall be provided where any part of the subdivision is on both sides of the existing public way; or
 - (2) when the subdivision is located on only one side of an existing public way, one-half of the required right-of-way, measured from the center line of the existing pavement shall be provided.
- 5-103.4 Public Way Surfacing and Improvements -- After underground utilities have been installed, the subdivider shall construct curbs or curbs with gutters, where required, and shall surface or cause to be surfaced public ways to the widths prescribed in these regulations. Any required lane additions, lane widening, roadway widening, width expansions, open cuts

65

for utility installations or other operations requiring alterations of the existing roadway edges and/or roadway surface shall require a full width asphaltic topping overlay. No patch work or additions will be allowed without a full overlay. The thickness of the new overlay and the bituminous tack coat shall be in accordance with the requirements for each roadway classification as outlined in Article 6 Section 301 "Typical Sections" of these Subdivision Regulations. The length of the asphaltic topping overlay shall terminate at a suitable transition point of the existing roadway as to allow a smooth transition from new pavement to existing pavement. The length of the proposed full width overlay shall be approved by the Director of Public Works prior to commencement of work. It will be required to mill the existing asphalt topping to a depth to match the proposed overlay thickness, as to allow a smooth surface transition, at the ends where the proposed new asphalt is to terminate. The length of the required milling shall be adequate for the transition and shall be approved by the Director of Public Works. Bituminous tack coat shall be applied to the milled surface prior to installing the new asphalt topping overlay. No public way shall be surfaced until final approval of the subdivision plat has been obtained. Surfacing shall be of such character as is suitable for the expected traffic. Types and methods of paving shall be according to the specifications of the governing body, but in no event shall such construction be below the construction specifications set forth in the Article 6 of these regulations. Adequate provisions shall be made for culverts or other drains, and bridges, as required by the Director of Public Works.

All public way pavements, shoulders, drainage improvements and structures, any curb turnabouts, and sidewalks shall conform to all construction standards and specifications adopted by the Town of Smyrna and shall be incorporated into the construction plans required to be submitted by the developer for plat approval.

5-104 Road Construction Specifications -- The road construction specifications, Specifications for Stone Base Hot Asphaltic Mixture Surface, are included in these regulations as the Smyrna Typical Section, Section III and current T.D.O.T. Road and Bridge Specifications, and are adopted as a part hereof. These specifications shall be the minimum standards for any subdivision within the jurisdictional area. All roadway traffic markings shall be thermoplastic material and shall be installed in accordance with the TDOT Road and Bridge Specifications.

5-105 Drainage and Storm Sewers

General Requirements -- The Planning Commission shall not approve any plat of a subdivision which does not make adequate provisions for storm water or floodwater run-off channels or basins. The storm water drainage system shall be separate and independent from any sanitary sewer system. Storm sewers, where required, shall be designed by the Rational Method, or other methods as approved by the Director of Public Works, and a copy of design computations shall be submitted along with the necessary storm drainage construction plans. Inlets shall generally be provided so that surface water is not carried across or around any intersection, or any future planned intersection nor for a distance of more than six hundred (600) feet in the gutter. When calculations indicate that curb capacities are exceeded at a point, no further allowance shall be

used to intercept flow at that point. Surface water drainage patterns shall be shown for each and every lot and block.

5-105.2 Nature of Storm Water Facilities

5-105.201 <u>Location</u> -- The subdivider may be required by the Planning Commission to transport by pipe or open ditch any spring or surface water that may exist either prior to or as a result of the subdivision. Such drainage facilities shall be located in the public way right-of-way, where feasible, or in perpetual unobstructed easements of appropriate width and shall be constructed in accordance with the construction specifications contained in these regulations.

5-105.202 <u>Accessibility to Public Storm Sewers</u>

- (1) Where a public storm sewer is accessible, the developer shall install storm sewer facilities, or if no outlets are within a reasonable distance, adequate provision shall be made for the disposal of storm waters, in accordance with the Stormwater Management Ordinance and Tennessee Department of Environment and Conservation regulations and subject to the specifications of the appropriate governmental representative; inspection of facilities shall be conducted to assure compliance. Inspection of facilities shall be conducted by the Director of Public Works or his designee during construction and shall be inspected prior to final acceptance and approval. At the discretion of the Public Works Director, the public storm sewer facility may be required to be internally video inspected by the Town of Smyrna at a rate set forth in the fee schedule and performed at the developer's expense.
- (2) If a connection to a public storm sewer will be provided eventually, as determined by the Planning Commission, the subdivider shall make arrangements for future storm water disposal by a public system at the time the plat receives final approval. Provision for such connection shall be incorporated by inclusion in the performance bond required for the final subdivision plat.
- 5-105.203 Accommodation of Upstream Drainage Areas -- A culvert or other drainage facility shall in each case be large enough to accommodate potential runoff from its entire upstream drainage area, whether inside or outside the subdivision. Necessary facilities shall be sized based on the construction specifications and assuming conditions of maximum potential watershed development permitted by any zoning ordinance.
- 5-105.204 Effect on Downstream Drainage Areas -- The developer shall study the effect of stormwater drainage on existing downstream drainage facilities outside the area of the subdivision and shall provide the resulting report and drainage calculations. The Public Works Director or his designee shall review the submitted

information. Where it is anticipated that the additional runoff incident to the development of the subdivision will overload an existing downstream drainage facility, the Planning Commission may withhold approval of the subdivision until provisions have been made for adequate improvement of such drainage facilities. No subdivision shall be approved unless adequate drainage will be provided to an adequate drainage watercourse or facility.

5-105.205

Areas of Poor Drainage -- Whenever a plat is submitted for an area which is subject to flooding, the Planning Commission may approve such subdivision; provided, that the applicant fill the affected floodway fringe area of said subdivision to place public way elevations at no less than the regulatory flood elevation and first floor elevations (including basements) at no less than three (3) feet above the regulatory flood elevation. At a minimum, the lot serving any principal structure located within the 100 year flood area (the regulatory floodplain area) shall be filled to one (1) foot above the regulatory elevation for at least twenty-five (25) feet beyond the edge of said structure. Any fill material placed in the floodplain shall be offset by an equal amount of cut material removed within the floodplain. Proposed fill and cut volumes must be located on the same development site or on contiguous property or properties as long as adjoining property owners not involved in the project are not adversely affected by the cut and fill. Materials proposed for fill must be free of debris and organic matter and shall be approved by the Public Works Director or his designee. The plat of such subdivision shall provide for a floodway along the bank of any stream or watercourse of width sufficient to contain or move the water of the regulatory flood, and no fill shall be placed in the floodway; neither shall any building nor flood restrictive structure be erected or placed therein unless approved by the Director of Public Works and any other required State or federal authority. The boundaries of the floodway and floodway fringe area, and the regulatory flood elevation, shall be determined by the Planning Commission based upon the review specified in Section 3-104.2 of these regulations and the submission of flood data in construction plans as specified in Section 4-103 of these regulations. Any work or alteration within the floodplain shall not create additional areas of poor drainage and shall allow positive drainage at all times.

5-105.206

Floodplain Areas -- The Planning Commission may, when it deems it necessary for the health, safety, or welfare of the present and future population of the area or necessary to the conservation of water, drainage, and sanitary facilities, prohibit the subdivision of any portion of the property which lies within the floodplain of any stream or drainage course. The regulatory floodway shall be preserved from any and all alterations, including destruction or damage resulting from clearing, grading, or dumping of earth, waste material, or stumps. No work shall be performed in the floodwayunless approved by the Director of Public Works and any other required State or federal authority. Any subdivision which contains floodprone land shall be subject to the special provisions

set forth in Sections 3-102.4; 5-101.4; 5-104; and 5-105.2, of these regulations.

5-105.3 Dedication of Drainage Easements

5-105.301 General Requirements -- Where a subdivision or development is traversed by a watercourse, drainage way, channel, or stream, there shall be provided a storm water quality buffer zone easement extending two (2) times the width of the channel. The width shall be determined by measuring from the top-of-bank to top-of-bank of the watercourse. Said water quality buffer zone easement shall be located on both sides of said watercourse unless a licensed engineer, specializing in hydrology and stream buffer water quality studies, demonstrates to the satisfaction of the Director of Public Works or his designee that a lesser water quality buffer zone easement is required using adequate engineering quantitative methods. In this respect, all the criteria cited in section 5-101.4 of these regulations must be met and of such width and construction as will be adequate. Where open drainage ways are utilized they shall be designed for the twenty-five (25) year frequency flood. For the purposes of these regulations unmapped waterways and streams shall be defined as any creek, waterway, or stream shown on any official FEMA flood map panel, as well as any blue line stream, waterway, or channel shown on any U.S.G.S. quad sheet map and as determined by the Tennessee Department of Environment and Conservation. Water quality buffer zones shall be provided in accordance with the Stormwater Management Ordinance and the Tennessee Department of Environment and Conservation regulations.

5-105.302 Drainage Easements

- (1) Where topography or other conditions are such as to make impractical the inclusion of drainage facilities within a public way right-of-way, perpetual unobstructed easements at least ten (10) feet in width for such facilities shall be provided across property outside the public way lines and with satisfactory access to public ways. Whenever said easements are required which do not parallel lot lines they shall be twenty (20) feet in width. Additional width may be required by the Public Works Director or his designee. Easements shall be indicated on the preliminary and final plats. Drainage easements shall be carried from the public way to a natural watercourse or to other drainage facilities.
- (2) When a new drainage system is to be constructed which will carry water across private land outside the subdivision, appropriate drainage rights must be secured by legal document and indicated on the plat prior to approval of the preliminary plat.
- (3) The applicant shall dedicate, when required by the Planning Commission, either in fee, or by drainage or conservation easement, the land on both sides of existing

- watercourse to a distance to be determined by the Planning Commission.
- (4) Along watercourses, low-lying lands, and within any floodway, as determined by the Planning Commission pursuant to Section 3-104 of these regulations, whether or not included in areas for dedication, shall be preserved and retained in their natural state as drainage ways. (See Section 2-102 for a definition of low-lying lands and watercourses).
- (5) It shall be unlawful for any person or corporation, including the property owner, builder, or contractor to alter the drainage way in any Public Drainage easement, to plant trees in any drainage easement, to construct any building, fences, driveways or any structure as define herein, without prior written approval of the Director of Public Works.
- 5-105.303 <u>Ditching, Concrete Ditch Paving, and Culverts and Storm Drains</u> -- The design and construction details of drainage facilities shall be in accordance with the provisions of these regulations. The design and construction details of all such facilities shall be approved by the Director of Public Works.

5-106 Water Facilities

5-106.1 General Requirements

- (1) Necessary action shall be taken by the developer to extend a water supply system capable of providing domestic water use and fire protection.
- (2) Where a public water main is within reasonable access of the subdivision, as determined by the Planning Commission, the subdivider shall install adequate water facilities, including fire hydrants, subject to Town of Smyrna Water System Standard Specifications for New Construction, approval of the governing body, the Tennessee Department of Environment and Conservation, and these regulations. Such water lines shall be extended to the farthest end of the lot(s) being served, thereby.
- (3) All public water mains, including those required for fire protection, shall not be less than six (6) inches in diameter.
- (4) All water systems, whether public or private, located in a floodprone area shall be floodproofed to the regulatory flood protection elevation. All water supply facilities located below the regulatory flood protection elevation shall be designed to prevent the infiltration of floodwaters into the water supply system and discharges from the system into floodwaters.
- (5) All water systems shall be constructed and tested by a contractor properly licensed to do so under Tennessee law.

5-106.2 Fire Hydrants -- Fire hydrants shall be required in all subdivisions; they shall be located no more than one thousand (1,000) feet apart by street and be within five hundred (500) feet of the building envelopes of any residential, commercial, or industrial structure as measured by the servicing streets, except in those conditions wherein locally adopted fire codes dictate a closer and more restrictive spacing of fire hydrants. Also, the Planning Commission may require closer spacing where physical conditions or types of structures so warrant. To eliminate future public way cuttings or openings, all underground utilities for fire hydrants, together with the fire hydrants themselves, and all other water supply improvements shall be installed before any final paving of a public way shown on the subdivision plat, unless otherwise approved by the Planning Commission.

5-107 <u>Sewage Facilities</u>

5-107.1 General Requirements -- The applicant shall install sanitary sewer facilities in a manner prescribed by the regulations of the Tennessee Department of Environment and Conservation and by any other applicable standards and specifications. For a more comprehensive statement of Smyrna's sewerage standards, see Town of Smyrna Sanitary Sewer Standard Specifications for New Construction. All plans shall be designed and approved in accordance with the rules, regulations, specifications, and standards, of any applicable governmental agency or appropriate unit thereof.

5-107.2 <u>Mandatory Connection to Public Sewer System</u>

- When public sanitary sewers are within reasonable access of the subdivision, as determined by the Planning Commission, the subdivider shall provide sanitary sewer facilities to each lot therein and shall connect these facilities to the public system. The subdivider shall provide sewers which meet standards set forth in the regulations of the Tennessee Department of Environment and Conservation and the Town of Smyrna.
- (2) All sanitary sewer facilities located in a flood hazard area shall be floodproofed to the regulatory flood protection elevation. All sewer facilities located below the regulatory flood protection elevation shall be designed to prevent infiltration of floodwaters into the sewer system and discharges from the system into floodwaters.
- 5-107.3 Individual Disposal System Requirements -- If public sewer facilities are not available and individual disposal systems are proposed, lot areas shall not be less than the minimums specified in these regulations; all pertinent soil absorption tests shall be made as required by the Tennessee Department of Environment and Conservation and the results submitted to the Tennessee Department of Environment and Conservation for approval. The approval of any lot(s) served by a subsurface disposal system shall be made by the Smyrna Planning Commission and Town Council.

The individual disposal system, including the size of the septic tank and size of the tile fields or other secondary treatment device shall be located on the same platted lot as the dwelling unit serviced by said individual

system, and shall also be approved by the Tennessee Department of Environment and Conservation.

The Planning Commission may prohibit installation of sewage disposal facilities requiring soil absorption systems where such systems will not function due to high groundwater, flooding, or unsuitable soil characteristics. The Planning Commission may require that the subdivider note on the face of the plat and any deed of conveyance that soil absorption fields are prohibited in designated areas.

Alternative sewage disposal systems shall be reviewed and approved by the Smyrna Planning Commission and Town Council.

5-107.4 <u>Design Criteria for Sanitary Sewers</u>

5-107.401 <u>General</u> -- Sanitary sewer shall be designed and constructed in accordance with the Town of Smyrna Sewer System Standard Specifications for New Construction.

5-108 Pedestrian Ways

5-108.1 Sidewalks and Bicycle Paths -- Sidewalks and bicycle paths, where required by the Planning Commission, shall be included within the dedicated non-pavement right-of-way of all public ways as indicated in the following table and shall be improved as required by Section 5-103.4 of these regulations. Concrete curbs are required for all public ways where sidewalks are to be constructed. A median strip of grassed or landscaped area at least two (2) feet wide shall separate all sidewalks from adjacent curbs unless otherwise approved by the Planning Commission.

SIDEWALK DESIGN

Class of Street		Sidewalk Width
	<u>Public Way</u>	Nonresidential Public Way (Industrial, Residential Commercial; Other)*
Minor Public Way	5 feet wide	6 feet wide
Neighborhood Collector	5 feet wide	N/A
Collector Public Way	5 feet wide	6 feet wide
Arterial Public Way	5 feet wide	6 feet wide

^{*}Greenway or potential greenways as shown on the Town of Smyrna Greenway Plan shall be a minimum of eight (8) feet wide or as shown.

5-108.2 Pedestrian Accesses -- The Planning Commission may require, in order to facilitate pedestrian access from the public way to schools, parks, playgrounds, or other nearby public ways, perpetual unobstructed easements at least twenty (20) feet in width. Easements shall be indicated on the plat.

5-109 Utility Easements

- (1) Easements down rear lot lines or additionally across lots, if deemed necessary by the Planning Commission, shall be provided for utilities (private or public). Such easements shall be at least ten (10) feet wide except for across-lot easements which shall be at least twenty (20) feet wide or larger as required by the Director of Utilities or his designee. The subdivider shall take such actions as are necessary to ensure the coordination and continuation of utility easements established on adjacent properties with those proposed within his development.
- (2) Where topographical or other conditions are such as to make impractical the inclusion of utilities within rear lot lines, perpetual unobstructed easements at least ten (10) feet in width shall be provided along side lot lines with satisfactory access to public ways or rear lot lines. Additional width may be required by the Director of Utilities or his designee. Easements shall be indicated on the plat.
- (3) Temporary construction easements exceeding the width of permanent easements may be required as necessary until completion of any one project.
- (4) It shall be unlawful for any person or corporation, including the property owner, builder, or contractor to alter the utility easement, to plant trees in any utility easement, to construct any building, or fences, driveways or any structure as define herein without prior written approval of the Director of Utilities.
- (5) Utility easements associated with major electric or natural gas transmission lines shall not comprise more than twenty (20) percent of the minimum area or lot requirement under the Town of Smyrna Municipal Zoning Ordinance on any subdivided lot. Moreover, such easements shall be located on subdivided lots in a manner that preserves functional useable front and rear yards in the opinion of the Planning Commission. It shall be the prerogative of the Planning Commission to determine which electric and/or natural gas lines constitute major transmission lines for the purposes of this regulation.

5-110 Public Uses

5-110.1 Plat to Provide for Public Uses -- Whenever a tract to be subdivided includes a school, recreation use, a portion of a major public way, or other public use, as indicated on the Land Use Plan and/or Major Thoroughfare Plan, or any portion thereof, such tract shall be suitably incorporated by the developer into his plat when first presented for review by the Planning Commission.

After proper determination of its necessity by the Planning Commission and the appropriate governmental representative(s) involved in the acquisition and use of such site, and after a determination has been made to acquire the site by the public agency, the site shall be suitably

incorporated by the developer into the plat prior to final approval by the Planning Commission and recording of the plat.

5-110.2 Referral to the Governmental Agency Concerned -- The Planning Commission shall refer any plat presented in accordance with Section 5-110.1. The Planning Commission may propose alternate areas for such acquisition and shall allow the appropriate governmental agency thirty (30) days for reply.

Among the areas which the Planning Commission may propose for public acquisition, when the commission deems it appropriate and consistent with the policies and purposes set forth in these regulations, is any land within a floodway or floodway fringe determined according to the procedure outlined herein.

The acquiring agency's recommendation, if affirmative, shall include a map showing the boundaries and area of the parcel to be acquired and an estimate of the time required to complete the acquisition.

- 5-110.3 Notice to Property Owner -- Upon receipt of an affirmative report, the Planning Commission shall notify the property owner and shall designate on all plats any areas proposed to be acquired by any governmental agency. Upon such designation by the Planning Commission, any reserved portion of any floodway or floodway fringe area shall not be altered from its natural state by the developer in any manner whatsoever.
- 5-110.4 Duration of Land Reservation -- The acquisition of land reserved by a governmental agency on the final plat shall be initiated within twenty-four (24) months of notification, in writing, from the owner that he intends to develop the land. Such letter of intent shall be accompanied by a plat of a proposed development and a tentative schedule of construction. Failure on the part of the governmental agency to initiate acquisition within the prescribed twenty-four (24) months shall result in the removal of the "reserved" designation from the property involved and the freeing of the property for development in accordance with these regulations.
- 5-111 Preservation of Natural Features and Amenities -- Existing features which would add value to residential development or to the area as a whole, such as trees, watercourses and falls, historic locations, and similar irreplaceable assets, shall be preserved in the design of the subdivision, as required by the Planning Commission. No change of grade of the land shall be effected nor shall any natural features be removed or relocated until a preliminary subdivision plat has been approved by the Planning Commission.

5-112 Nonresidential Subdivisions

5-112.1 General -- If a proposed subdivision includes land which is zoned for a commercial or industrial purpose, the layout of the subdivision with respect to such land shall make such provisions as the Planning Commission may require. A nonresidential subdivision also shall be subject to all the requirements of site plan approval set forth in the Town of Smyrna Muncipal Zoning Ordinance. Site plan approval may proceed simultaneously at the discretion of the Planning Commission. A nonresidential subdivision shall be subject to all the requirements of

these regulations, as well as such additional standards set forth by the Planning Commission, and shall conform to the Land Use Plan, Major Thoroughfare Plan, and the Town of Smyrna Municipal Zoning Ordinance.

- 5-112.2 <u>Standards</u> -- In addition to the principles and standards in the regulations, which are appropriate to the planning of all subdivisions, the subdivider shall demonstrate to the satisfaction of the Planning Commission that the public way, parcel, and block pattern proposed is specifically adapted to the uses anticipated and takes into account other uses in the vicinity. The following principles and standards shall be observed:
 - (1) proposed industrial parcels shall be suitable in areas and dimensions to the types of industrial development anticipated;
 - (2) public way rights-of-way and pavements shall be adequate to accommodate the type and volume of traffic anticipated;
 - (3) special requirements may be imposed by the governing body with respect to any public way, curb, gutter, and sidewalk design and construction specifications;
 - (4) special requirements may be imposed by the governing body with respect to the installation of public utilities, including water, sewer, and storm water drainage. The Planning Commission, in its discretion, may require that utilities be placed underground;
 - (5) every effort shall be made to protect adjacent residential areas from potential nuisances from the proposed nonresidential subdivision, including the provision of extra depth in parcels backing on existing or potential residential development, provisions for permanently landscaped buffer strips, and restrictive lighting conditions, when necessary; and
 - (6) public way carrying nonresidential traffic, especially truck, normally shall not be extended to the boundaries of adjacent existing or potential residential areas.

5-113 Maintenance of Common Property

- 5-113.1 General Whenever a development includes areas, structures, features, or other items designated on a plat as "common area", "common elements", or some such similar designation, or in the event a developer shall undertake to maintain landscaping or some other feature in or on a public right of way (together or separately, "Common Property"), the following shall apply:
 - (1) An owners association must be established as a non-profit corporation or similar entity. Membership in such association must be mandatory for all owners and successive owners of property in the development, and each member must be legally obligated to pay dues and/or assessments for the pro rata cost of

- maintenance and repair of, as appropriate, and taxes on, the Common Property.
- (2) The association must have the power to record a Declaration of Lien on the property of any owner who has not paid dues and/or assessments.
- (3) The association must have the power to provide and maintain casualty insurance on any structures or other improvements to assure replacement if same are damaged or destroyed.
- (4) The association must have the power to provide and the responsibility to maintain liability insurance covering all Common Property.
- (5) The Common Property must be clearly identified on the final plat; the final plat must also contain a plat note regarding the existence of a mandatory owners association.
- (6) The developer must record an appropriate Declaration of Covenants and Restrictions covering the establishment and use of the Common Property as well as appropriate provisions for the establishment of the owners association, including but not limited to articles of organization and bylaws or their equivalent.
- (7) The Common Property, along with the provisions of the Declaration of Covenants and Restrictions with respect to any Common Property, must be perpetual, and neither can be eliminated, deleted, amended, or modified without the consent of the Town evidenced by an amendment to the final plat and any other agreements or releases as deemed appropriate by the Town.
- (8) The developer must either (i) convey title to the Common Property to the association or (ii) establish a perpetual easement over the Common Property with appropriate rights of access for the association.
- (9)If the Common Property includes storm water drainage, detention or retention facilities, post-construction best management practices, landscaping or signage, or other elements which could reasonably be anticipated to have an adverse health, safety, welfare, or property values of the development or on persons or properties surrounding the development if not properly maintained or repaired, the Declaration of Covenants and Restrictions must provide that if the association fails to maintain or repair such Common Property to the standards required by Town ordinance or code the Town shall have the right and power, but not the responsibility, to maintain or repair such Common Property on behalf of the association and if the Town elects to so maintain or repair such Common Property, to pro rate assess property owners in the development in the name of the association to recover the costs of such maintenance or repair, and to record a Declaration

- of Lien against the property of any owner in the development who has not paid such assessment within the time allowed.
- (10) The Declaration of Covenants and Restrictions must also establish the Town as a third party beneficiary of the covenants and restrictions with the right and power, but not the responsibility, to enforce any and all such covenants and restrictions with regards to Common Property within the development.
- (11) The developer must undertake to assure that all prospective purchasers within the development receive copies of the Declaration of Covenants and Restrictions and of all other documentation related to the owners association.
- (12) The developer must submit evidence satisfactory to the Town staff that all the above requirements have been fulfilled prior to the issuance of any building permits for the development.

ARTICLE 6

PUBLIC WORKS SPECIFICATIONS

SECTION I. GENERAL

- 6-101 <u>Jurisdiction These rules and regulations governing the construction of roads and streets shall apply within the planning jurisdiction of the Smyrna Municipal Planning Commission.</u>
- 6-102 Purpose The purpose of these specifications is to establish standards of design and construction, including construction procedures and quality of materials that are adequate to assure the safety, convenience, and welfare of the people within the planning jurisdiction.

6-103 Definitions

<u>A.A.S.H.T.O.</u> - American Association of State Highway and Transportation Officials.

A.S.T.M. - American Society for Testing Materials.

<u>Enforcing Officer</u> - That individual designated by the Town Council of the local government to enforce these provisions.

<u>Engineer</u> - An engineer licensed by the State Board of Architectural and Engineer Examiners pursuant to Section 62-202, <u>Tennessee Code Annotated</u>.

<u>Local Government</u> - The town or county government having jurisdiction within the area where a development is located.

<u>Local Government Engineer</u> - That individual designated by the local government to receive and review plans submitted in conformance with the provisions of this section.

MUTCD – Manual of Uniform Traffic Control Devices

<u>Standard Specifications</u> - <u>Standard Specifications for Road and Bridge Construction</u>, Tennessee Department of Transportation, March 1, 2006, and subsequent revisions and additions.

TDEC – Tennessee Department of Environment and Conservation

- 6-104 <u>Approvals</u> All construction plans of roads and streets shall be prepared and submitted to the Director of Public Works. The content and submission procedure shall be as set forth in Section II, Planning.
- 6-105 Acceptance Acceptance for public maintenance of any facilities or improvements located within any subdivision may only be accomplished by formal action of the governing body in the manner established in Section 7-101.7 of these regulations. Any approval of plans, etc., submitted in conformance with these provisions, shall not in any manner bind or presuppose acceptance of these facilities by the governing body.

6-106 Responsibility of Compliance - In all matters involving enforcement of, or compliance with, the provisions contained herein, the subdivider (as defined in Section 2-102) is considered as the party legally responsible for performance; and the use of engineers, contractors, or other agents shall in no way diminish or absolve the subdivider of this basic responsibility.

SECTION II. PLANNING

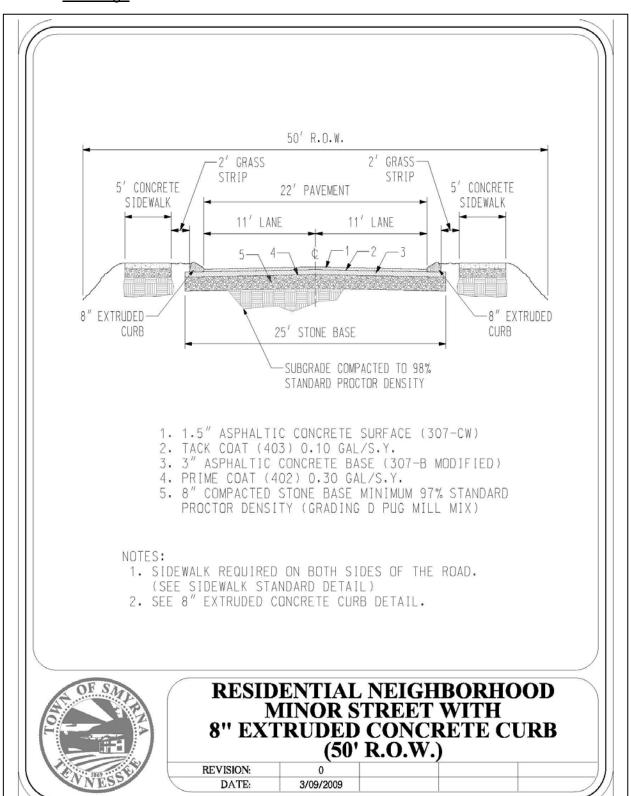
- 6-201 <u>Plan Preparation</u> All construction plans for improvements within land subdivisions shall be prepared by engineers licensed to practice within the State of Tennessee. The plans shall bear the stamp and signature of the individual responsible for their preparation.
- 6-202 <u>Content</u> The information set forth in Section 4-103 shall be required upon each and every plan submitted hereunder. In any instance where special conditions may warrant, additional data may be required.
- 6-203 <u>Submission, Review, and Approval</u> When the plans are complete, with all required data entered thereon, they shall be submitted to the local government engineer for review and comment prior to formal presentation before the Planning Commission. If the Town Planner finds that the plans are in order and all required information is presented, he shall forward the plans to the Planning Commission for review and approval. Should any disagreement between the local government engineer and the subdivider (or his engineer) arise as to the nature of, or requirement for, any particular improvement or facility, the plans may be forwarded to the Planning Commission for arbitration of the dispute.

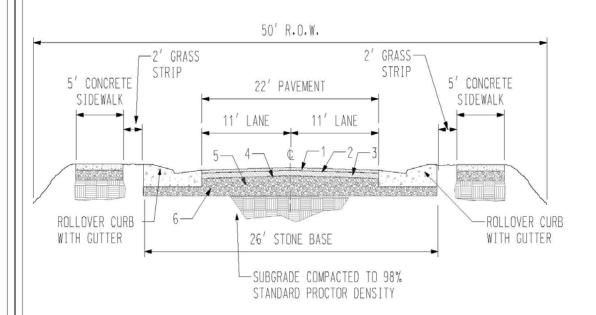
Action by the Planning Commission may come in the form of unconditional approval of the plans as submitted, conditional approval, or disapproval. Should the commission's action come in the form of conditional approval, the applicant may modify and resubmit the plans to the Town Planner for further review. Should the local Town Planner find that the conditions established by the commission have been met, he may so certify in which instance the plans shall be considered approved.

6-204 <u>Action Upon Approval</u> - Once the plans have received approval as set forth above, construction may begin.

SECTION III. Typical Sections

6-301 <u>Drawings</u>





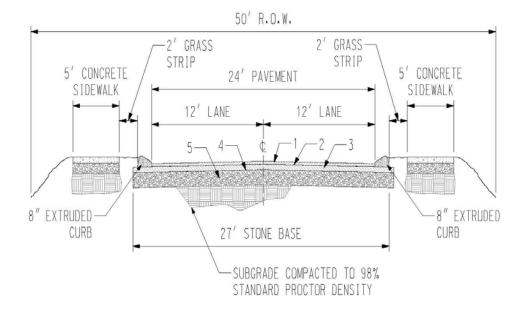
- 1. 1.5" ASPHALTIC CONCRETE SURFACE (307-CW)
- 2. TACK COAT (403) 0.10 GAL/S.Y.
- 3. 3" ASPHALTIC CONCRETE BASE (307-B MODIFIED)
- 4. PRIME COAT (402) 0.30 GAL/S.Y.
- 5. 8" COMPACTED STONE BASE MINIMUM 97% STANDARD PROCTOR DENSITY (GRADING D PUG MILL MIX)
- 6. BASE MATERIAL FOR CURB AND GUTTER SHALL BE NO LESS THAN 4".

- 1. SIDEWALK REQUIRED ON BOTH SIDES OF THE ROAD. (SEE SIDEWALK STANDARD DETAIL SHEET)
- 2. STANDARD ROLLOVER CURB AND GUTTER (SEE ROLLOVER CURB WITH GUTTER STANDARD DETAIL).



RESIDENTIAL NEIGHBERHOOD MINOR STREET WITH ROLLOVER CURB AND GUTTER (50' R.O.W.)

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DATE:	3/09/2009	



- 1. 1.5" ASPHALTIC CONCRETE SURFACE (307-CW)
- 2. TACK COAT (403) 0.10 GAL/S.Y.
- 3. 3" ASPHALTIC CONCRETE BASE (307-B MODIFIED)
- 4. PRIME COAT (402) 0.30 GAL/S.Y.
- 5. 8" COMPACTED STONE BASE MINIMUM 97% STANDARD PROCTOR DENSITY (GRADING D PUG MILL MIX)

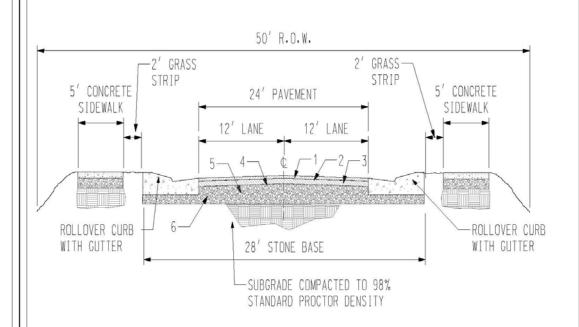
- 1. SIDEWALK REQUIRED ON ONE SIDE OF THE ROAD. (SEE SIDEWALK STANDARD DETAIL)
- 2. SEE 8" EXTRUDED CONCRETE CURB DETAIL.



RESIDENTIAL NEIGHBORHOOD COLLECTOR STREET WITH 8" EXTRUDED CONCRETE CURB (50' R.O.W.)

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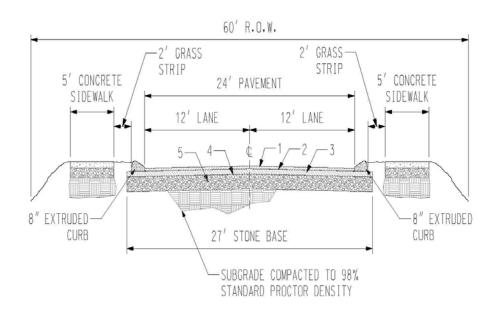
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- 2. TACK COAT (403) 0.10 GAL/S.Y.
- 3. 3" ASPHALTIC CONCRETE BASE (307-B MODIFIED)
- 4. PRIME COAT (402) 0.30 GAL/S.Y.
- 5. 8" COMPACTED STONE BASE MINIMUM 97% STANDARD PROCTOR DENSITY (GRADING D PUG MILL MIX)
- 6. BASE MATERIAL FOR CURB AND GUTTER SHALL BE NO LESS THAN 4".

- 1. SIDEWALK REQUIRED ON BOTH SIDES OF THE ROAD. (SEE SIDEWALK STANDARD DETAIL SHEET)
- 2. STANDARD ROLLOVER CURB AND GUTTER (SEE ROLLOVER CURB WITH GUTTER STANDARD DETAIL).



RESIDENTIAL NEIGHBERHOOD COLLECTOR STREET WITH ROLLOVER CURB AND GUTTER (50' R.O.W.)

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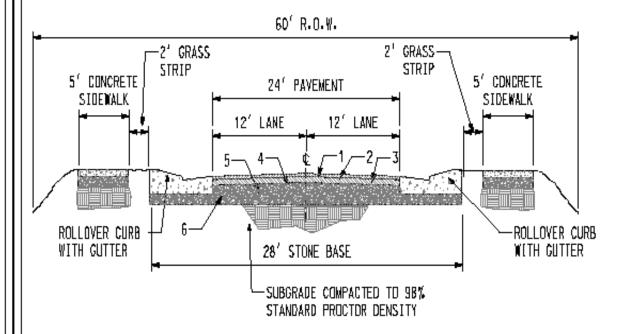
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- 3. 3" ASPHALTIC CONCRETE BASE (307-B MODIFIED)
- 4. PRIME COAT (402) 0.30 GAL/S.Y.
- 5. 8" COMPACTED STONE BASE MINIMUM 97% STANDARD PROCTOR DENSITY (GRADING D PUG MILL MIX)

- 1. SIDEWALK REQUIRED ON BOTH SIDES OF THE ROAD. (SEE SIDEWALK STANDARD DETAIL)
- 2. SEE 8" EXTRUDED CONCRETE CURB DETAIL.



RESIDENTIAL COLLECTOR STREET WITH 8" EXTRUDED CONCRETE CURB (60' R O W)

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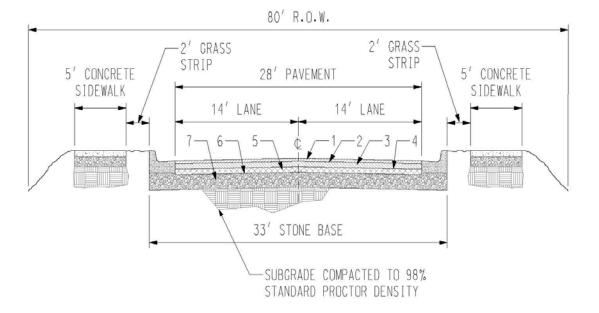
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- 3. 3" ASPHALTIC CONCRETE BASE (307-B MODIFIED)
- 4. PRIME COAT (402) 0.30 GAL/S.Y.
- 5. 8" COMPACTED STONE BASE MINIMUM 97% STANDARD PROCTOR DENSITY (GRADING D PUG MILL MIX)
- 6. BASE MATERIAL FOR CURB AND GUTTER SHALL BE NO LESS THAN 4".

- 1. SIDEWALK REQUIRED ON BOTH SIDES OF THE RDAD. (SEE SIDEWALK STANDARD DETAIL SHEET)
- STANDARD RDLLQVER CURB AND GUTTER (SEE ROLLQVER CURB WITH GUTTER STANDARD DETAIL).



RESIDENTIAL COLLECTOR STREET WITH ROLLOVER CURB AND GUTTER (60 R.O.W.)

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DATE	3/09/2009		



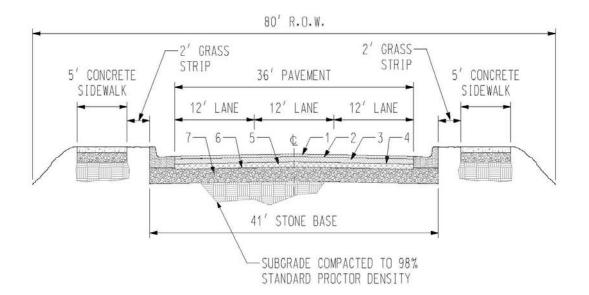
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- 3. 3" ASPHALTIC CONCRETE BASE (307-B MODIFIED)
- 4. TACK COAT (403) 0.10 GAL/S.Y.
- 5. 3" ASPHALTIC CONCRETE BASE (307-A MIX)
- 6. PRIME COAT (402) 0.30 GAL/S.Y.
- 7. 8" COMPACTED STONE BASE MINIMUM 97% STANDARD PROCTOR DENSITY (GRADING D PUG MILL MIX)

- 1. SIDEWALKS REQUIRED ON BOTH SIDES OF THE ROAD. (SEE SIDEWALK STANDARD DETAIL SHEET)
 2. STANDARD CURB AND GUTTER (24" GUTTER WIDTH
- AND 6" CURB WIDTH).



RESIDENTIAL ARTERIAL STREET (2-LANE) (80' R.O.W.)

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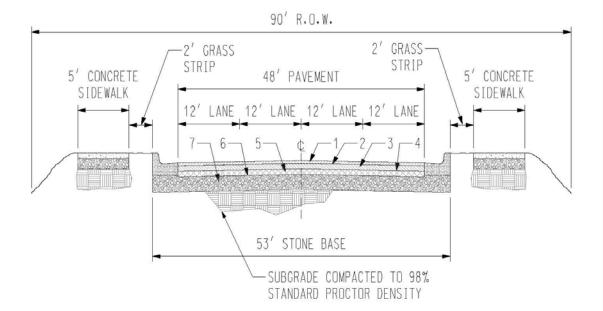
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- 3. 3" ASPHALTIC CONCRETE BASE (307-B MODIFIED)
- 4. TACK COAT (403) 0.10 GAL/S.Y.
- 5. 3" ASPHALTIC CONCRETE BASE (307-A MIX)
- 6. PRIME COAT (402) 0.30 GAL/S.Y.
- 7. 8" COMPACTED STONE BASE MINIMUM 97% STANDARD PROCTOR DENSITY (GRADING D PUG MILL MIX)

- 1. SIDEWALKS REQUIRED ON BOTH SIDES OF THE ROAD. (SEE SIDEWALK STANDARD DETAIL SHEET)
- 2. STANDARD CURB AND GUTTER (24" GUTTER WIDTH AND 6" CURB WIDTH).



RESIDENTIAL ARTERIAL STREET (3-LANE) (80' R.O.W.)

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DATE:	5/02/2008	



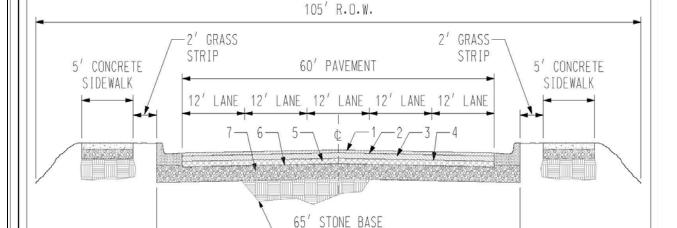
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- 3. 3" ASPHALTIC CONCRETE BASE (307-B MODIFIED)
- 4. TACK COAT (403) 0.10 GAL/S.Y.
- 5. 3" ASPHALTIC CONCRETE BASE (307-A MIX)
- 6. PRIME COAT (402) 0.30 GAL/S.Y.
- 7. 8" COMPACTED STONE BASE MINIMUM 97% STANDARD PROCTOR DENSITY (GRADING D PUG MILL MIX)

- 1. SIDEWALKS REQUIRED ON BOTH SIDES OF THE ROAD. (SEE SIDEWALK STANDARD DETAIL SHEET)
- 2. STANDARD CURB AND GUTTER (24" GUTTER WIDTH AND 6" CURB WIDTH).



RESIDENTIAL ARTERIAL STREET (4-LANE) (90' R.O.W.)

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DATE:	5/02/2008		



- 1. 1.5" ASPHALTIC CONCRETE SURFACE (307-CW)
- 2. TACK COAT (403) 0.10 GAL/S.Y.
- 3. 3" ASPHALTIC CONCRETE BASE (307-B MODIFIED)

SUBGRADE COMPACTED TO 98% STANDARD PROCTOR DENSITY

- 4. TACK COAT (403) 0.10 GAL/S.Y.
- 5. 3" ASPHALTIC CONCRETE BASE (307-A MIX)
- 6. PRIME COAT (402) 0.30 GAL/S.Y.
- 7. 8" COMPACTED STONE BASE MINIMUM 97% STANDARD PROCTOR DENSITY (GRADING D PUG MILL MIX)

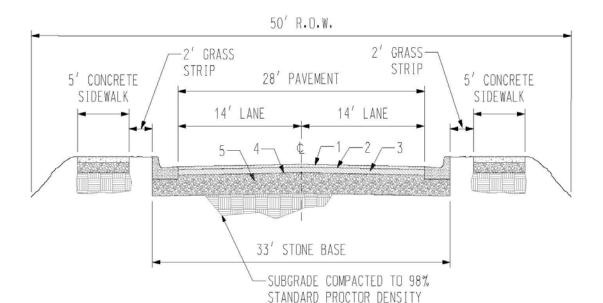
NOTES:

- 1. SIDEWALKS REQUIRED ON BOTH SIDES OF THE ROAD. (SEE SIDEWALK STANDARD DETAIL SHEET)
- 2. STANDARD CURB AND GUTTER (24" GUTTER WIDTH AND 6" CURB WIDTH).



RESIDENTIAL ARTERIAL STREET (5-LANE) (105' R.O.W.)

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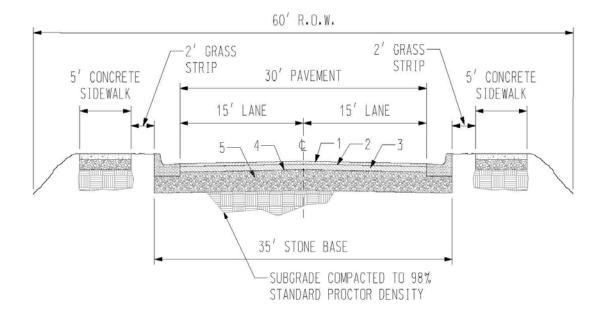
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- 2. TACK COAT (403) 0.10 GAL/S.Y.
- 3. 3" ASPHALTIC CONCRETE BASE (307-B MODIFIED)
- 4. PRIME COAT (402) 0.30 GAL/S.Y.
- 5. 8" COMPACTED STONE BASE MINIMUM 97% STANDARD PROCTOR DENSITY (GRADING D PUG MILL MIX)

- 1. SIDEWALKS REQUIRED ON BOTH SIDES OF THE ROAD. (SEE SIDEWALK STANDARD DETAIL SHEET)
- 2. STANDARD CURB AND GUTTER (24" GUTTER WIDTH AND 6" CURB WIDTH).



NON-RESIDENTIAL MINOR STREET (50' R.O.W.)

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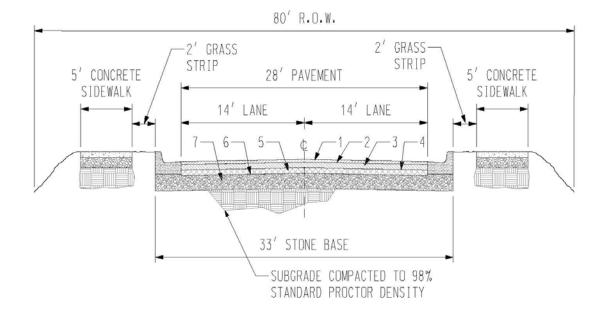
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- 3. 3" ASPHALTIC CONCRETE BASE (307-B MODIFIED)
- 4. PRIME COAT (402) 0.30 GAL/S.Y.
- 5. 8" COMPACTED STONE BASE MINIMUM 97% STANDARD PROCTOR DENSITY (GRADING D PUG MILL MIX)

- 1. SIDEWALKS REQUIRED ON BOTH SIDES OF THE ROAD. (SEE SIDEWALK STANDARD DETAIL SHEET)
- 2. STANDARD CURB AND GUTTER (24" GUTTER WIDTH AND 6" CURB WIDTH).



NON-RESIDENTIAL COLLECTOR STREET (60' R.O.W.)

REVISION:	0	
DATE:	5/02/2008	



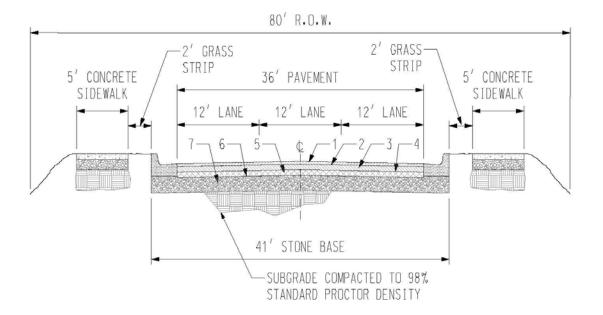
- 1. 1.5" ASPHALTIC CONCRETE SURFACE (307-CW)
- 2. TACK COAT (403) 0.10 GAL/S.Y.
- 3. 3" ASPHALTIC CONCRETE BASE (307-B MODIFIED)
- 4. TACK COAT (403) 0.10 GAL/S.Y.
- 5. 3" ASPHALTIC CONCRETE BASE (307-A MIX)
- 6. PRIME COAT (402) 0.30 GAL/S.Y.
- 7. 10" COMPACTED STONE BASE MINIMUM 97% STANDARD PROCTOR DENSITY (GRADING D PUG MILL MIX)

- 1. SIDEWALKS REQUIRED ON BOTH SIDES OF THE ROAD. (SEE SIDEWALK STANDARD DETAIL SHEET)
- 2. STANDARD CURB AND GUTTER (24" GUTTER WIDTH AND 6" CURB WIDTH).



NON-RESIDENTIAL ARTERIAL STREET (2-LANE) (80' R.O.W.)

REVISION:	0		
DATE:	5/02/2008		



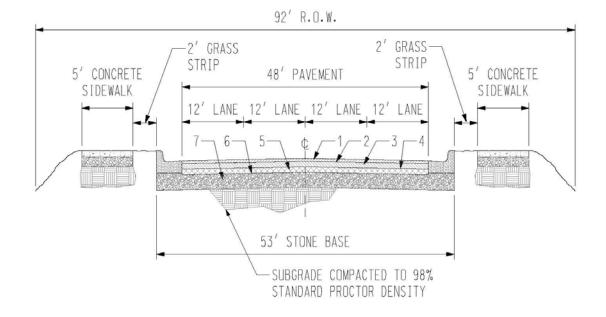
- 1. 1.5" ASPHALTIC CONCRETE SURFACE (307-CW)
- 2. TACK COAT (403) 0.10 GAL/S.Y.
- 3. 3" ASPHALTIC CONCRETE BASE (307-B MODIFIED)
- 4. TACK COAT (403) 0.10 GAL/S.Y.
- 5. 3" ASPHALTIC CONCRETE BASE (307-A MIX)
- 6. PRIME COAT (402) 0.30 GAL/S.Y.
- 7. 10" COMPACTED STONE BASE MINIMUM 97% STANDARD PROCTOR DENSITY (GRADING D PUG MILL MIX)

- 1. SIDEWALKS REQUIRED ON BOTH SIDES OF THE ROAD. (SEE SIDEWALK STANDARD DETAIL SHEET)
- 2. STANDARD CURB AND GUTTER (24" GUTTER WIDTH AND 6" CURB WIDTH).



NON-RESIDENTIAL ARTERIAL STREET (3-LANE) (80' R.O.W.)

REVISION:	0		
DATE:	5/02/2008		



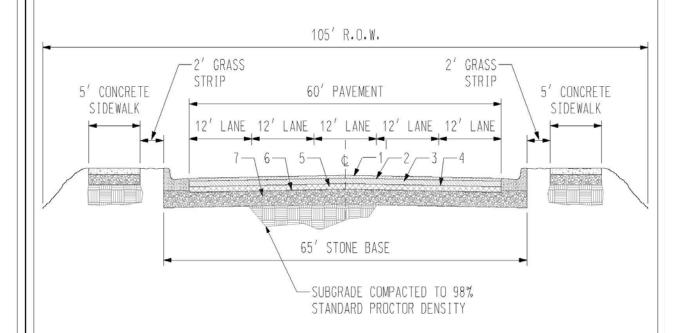
- 1. 1.5" ASPHALTIC CONCRETE SURFACE (307-CW)
- 2. TACK COAT (403) 0.10 GAL/S.Y.
- 3. 3" ASPHALTIC CONCRETE BASE (307-B MODIFIED)
- 4. TACK COAT (403) 0.10 GAL/S.Y.
- 5. 3" ASPHALTIC CONCRETE BASE (307-A MIX)
- 6. PRIME COAT (402) 0.30 GAL/S.Y.
- 7. 10" COMPACTED STONE BASE MINIMUM 97% STANDARD PROCTOR DENSITY (GRADING D PUG MILL MIX)

- 1. SIDEWALKS REQUIRED ON BOTH SIDES OF THE ROAD. (SEE SIDEWALK STANDARD DETAIL SHEET)
- 2. STANDARD CURB AND GUTTER (24" GUTTER WIDTH AND 6" CURB WIDTH).



NON-RESIDENTIAL ARTERIAL STREET (4-LANE) (92' R.O.W.)

REVISION:	0	
DATE:	5/02/2008	



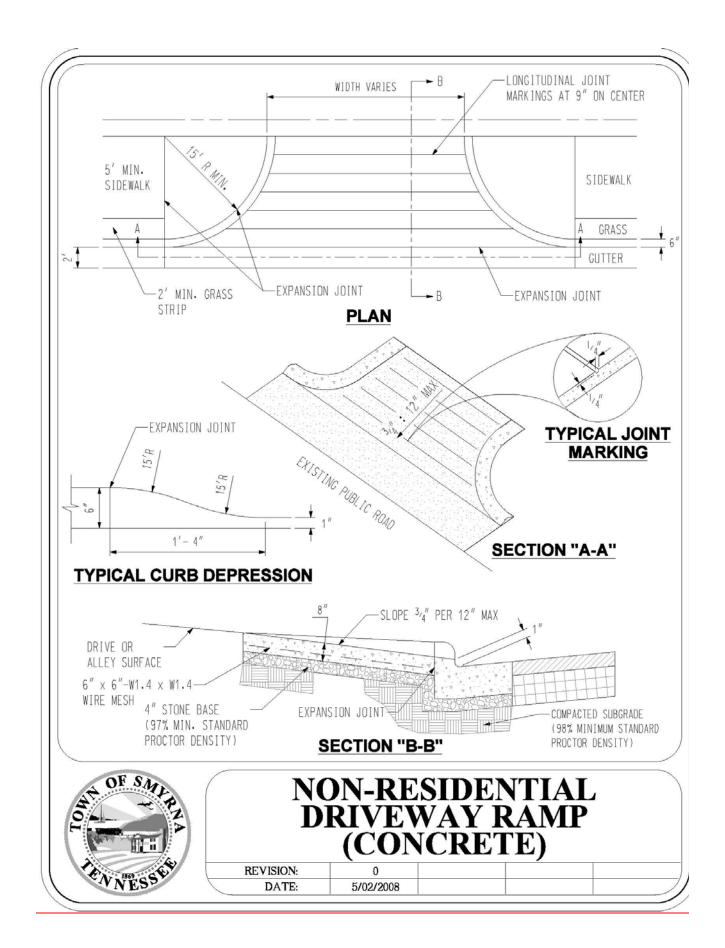
- 1. 1.5" ASPHALTIC CONCRETE SURFACE (307-CW)
- 2. TACK COAT (403) 0.10 GAL/S.Y.
- 3. 3" ASPHALTIC CONCRETE BASE (307-B MODIFIED)
- 4. TACK COAT (403) 0.10 GAL/S.Y.
- 5. 3" ASPHALTIC CONCRETE BASE (307-A MIX)
- 6. PRIME COAT (402) 0.30 GAL/S.Y.
- 7. 10" COMPACTED STONE BASE MINIMUM 97% STANDARD PROCTOR DENISTY (GRADING D PUG MILL MIX)

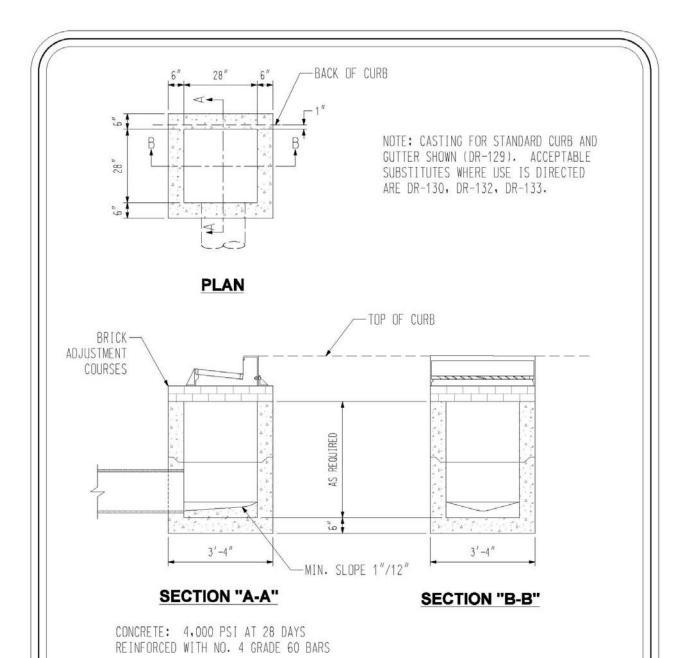
- 1. SIDEWALKS REQUIRED ON BOTH SIDES OF THE ROAD. (SEE SIDEWALK STANDARD DETAIL SHEET)
- 2. STANDARD CURB AND GUTTER (24" GUTTER WIDTH AND 6" CURB WIDTH).



NON-RESIDENTIAL ARTERIAL STREET (5-LANE) (105' R.O.W.)

REVISION:	0		
DATE:	5/02/2008		







SINGLE INLET (PRECAST)

REVISION:	0		
DATE:	5/02/2008		

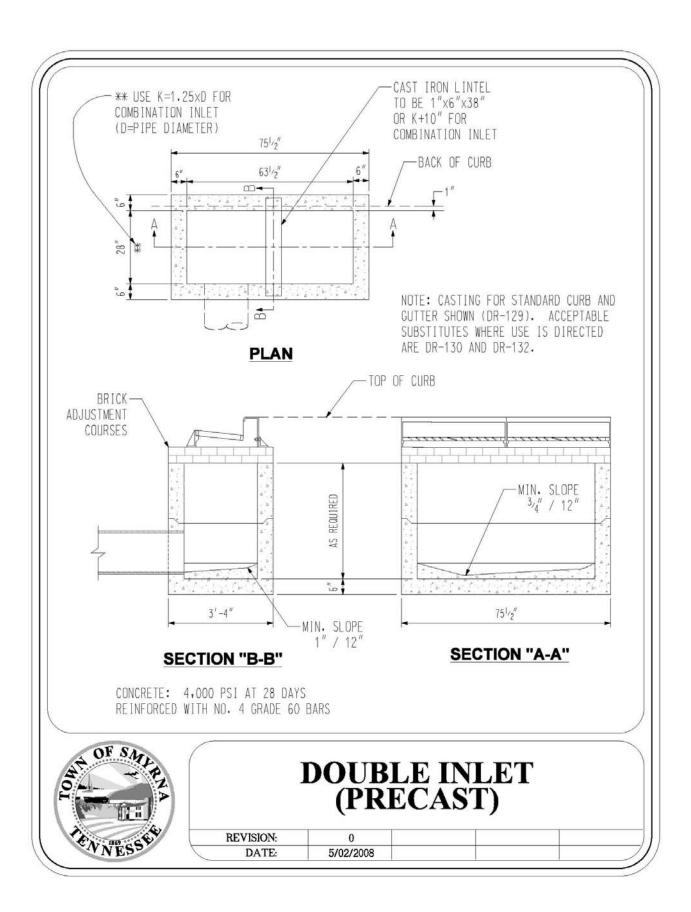
- 1. POURED-IN-PLACE CATCH BASINS ARE NOT ALLOWED UNLESS SPECIAL CONDITIONS EXIST WHICH PREVENTS A PRECAST STRUCTURE FROM BEING UTILIZED AND SHALL REQUIRE APPROVAL BY THE PUBLIC WORKS DEPARTMENT PRIOR TO INSTALLTION. IF APPROVED, THE POURED-IN-PLACE CATCH BASIN SHALL BE FORMED WITH STANDARD PLYWOOD FORMING MATERIALS UTILIZING NO. 4 REINFORCEMENT STEEL EVERY 6", 4,000 PSI CONCRETE, AND DIMENSIONS AS INDICATED BY THIS STANDARD DRAWING.
- 2. ADJUSTMENT COURSE BRICK, PIPE CONNECTION, AND CASTING CONNECTION SHALL BE SEALED ENTIRELY WITH NON-SHRINK GROUT.
- 3. ROCKS, WOOD, AND OTHER FOREIGN MATERIAL SHALL NOT BE ALLOWED FOR PIPE CONNECTION OR CASTING CONNECTION AND ADJUSTMENTS.
- 4. ALIGNMENT AND SETTING OF THE CASTING SHALL BE AS INDICATED ON THIS DRAWING AND SHALL BE PLACED ON THE PRECAST STRUCTURE WITH NO NON-BEARING GAPS ALLOWED.
- 5. CASTING CURB BACK TO INCLUDE "NO DUMPING DRAINS TO RIVER" TEXT AND SHALL BE CAST AS PART OF THE CASTING.
- 6. ALL STRUCTURES LOCATED IN ROADWAYS SHALL BE BACKFILLED FULL DEPTH WITH TDOT #67 STONE. THE STRUCTURE SHALL SET ON A MINIMUM 6" THICK STONE BEDDING (TDOT #67 STONE).



SINGLE INLET (PRECAST) NOTES

REVISION:	0		
DATE:	5/02/2008		

98

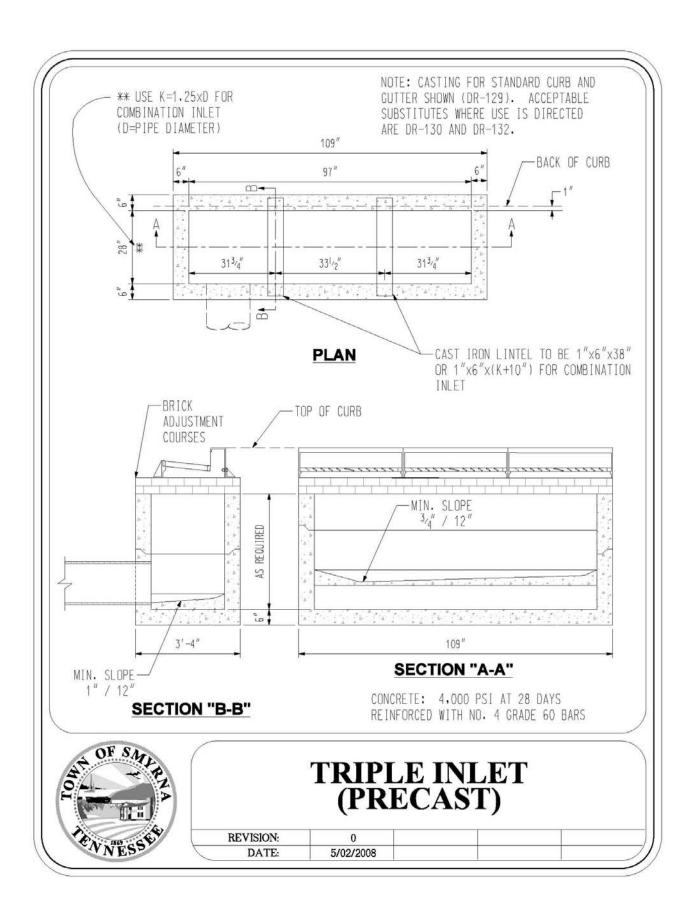


- 1. POURED-IN-PLACE CATCH BASINS ARE NOT ALLOWED UNLESS SPECIAL CONDITIONS EXIST WHICH PREVENTS A PRECAST STRUCTURE FROM BEING UTILIZED AND SHALL REQUIRE APPROVAL BY THE PUBLIC WORKS DEPARTMENT PRIOR TO INSTALLTION. IF APPROVED, THE POURED-IN-PLACE CATCH BASIN SHALL BE FORMED WITH STANDARD PLYWOOD FORMING MATERIALS UTILIZING NO. 4 REINFORCEMENT STEEL EVERY 6", 4,000 PSI CONCRETE, AND DIMENSIONS AS INDICATED BY THIS STANDARD DRAWING.
- 2. ADJUSTMENT COURSE BRICK, PIPE CONNECTION, AND CASTING CONNECTION SHALL BE SEALED ENTIRELY WITH NON-SHRINK GROUT,
- 3. ROCKS, WOOD, AND OTHER FOREIGN MATERIAL SHALL NOT BE ALLOWED FOR PIPE CONNECTION OR CASTING CONNECTION AND ADJUSTMENTS.
- 4. ALIGNMENT AND SETTING OF THE CASTING SHALL BE AS INDICATED ON THIS DRAWING AND SHALL BE PLACED ON THE PRECAST STRUCTURE WITH NO NON-BEARING GAPS ALLOWED.
- 5. CASTING CURB BACK TO INCLUDE "NO DUMPING DRAINS TO RIVER" TEXT AND SHALL BE CAST AS PART OF THE CASTING.
- 6. ALL STRUCTURES LOCATED IN ROADWAYS SHALL BE BACKFILLED FULL DEPTH WITH TDOT #67 STONE. THE STRUCTURE SHALL SET ON A MINIMUM 6" THICK STONE BEDDING (TDOT #67 STONE).



DOUBLE INLET (PRECAST) NOTES

REVISION:	0		
DATE:	5/02/2008		

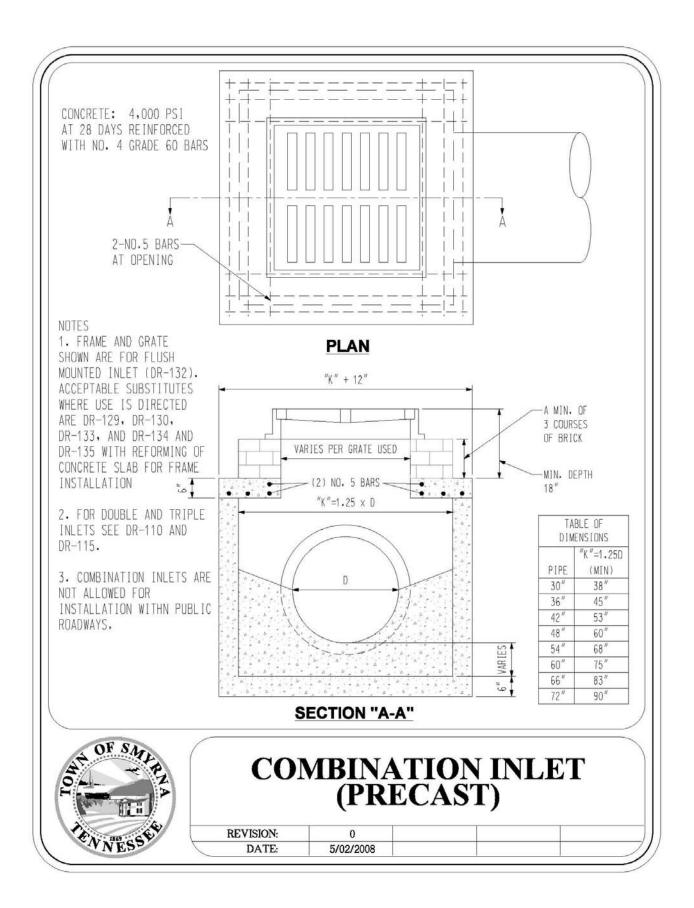


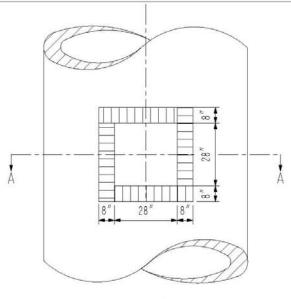
- 1. POURED-IN-PLACE CATCH BASINS ARE NOT ALLOWED UNLESS SPECIAL CONDITIONS EXIST WHICH PREVENTS A PRECAST STRUCTURE FROM BEING UTILIZED AND SHALL REQUIRE APPROVAL BY THE PUBLIC WORKS DEPARTMENT PRIOR TO INSTALLTION. IF APPROVED, THE POURED-IN-PLACE CATCH BASIN SHALL BE FORMED WITH STANDARD PLYWOOD FORMING MATERIALS UTILIZING NO. 4 REINFORCEMENT STEEL EVERY 6", 4,000 PSI CONCRETE, AND DIMENSIONS AS INDICATED BY THIS STANDARD DRAWING.
- 2. ADJUSTMENT COURSE BRICK, PIPE CONNECTION, AND CASTING CONNECTION SHALL BE SEALED ENTIRELY WITH NON-SHRINK GROUT.
- 3. ROCKS, WOOD, AND OTHER FOREIGN MATERIAL SHALL NOT BE ALLOWED FOR PIPE CONNECTION OR CASTING CONNECTION AND ADJUSTMENTS.
- 4. ALIGNMENT AND SETTING OF THE CASTING SHALL BE AS INDICATED ON THIS DRAWING AND SHALL BE PLACED ON THE PRECAST STRUCTURE WITH NO NON-BEARING GAPS ALLOWED.
- 5. CASTING CURB BACK TO INCLUDE "NO DUMPING DRAINS TO RIVER" TEXT AND SHALL BE CAST AS PART OF THE CASTING.
- 6. ALL STRUCTURES LOCATED IN ROADWAYS SHALL BE BACKFILLED FULL DEPTH WITH TDOT #67 STONE. THE STRUCTURE SHALL SET ON A MINIMUM 6" THICK STONE BEDDING (TDOT #67 STONE).



TRIPLE INLET (PRECAST) NOTES

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REVISION:	0		
DATE:	5/02/2008		





PLAN

NOTE:

THIS INLET TO BE USED ON 60" PIPE AND LARGER

SECTION "A-A"

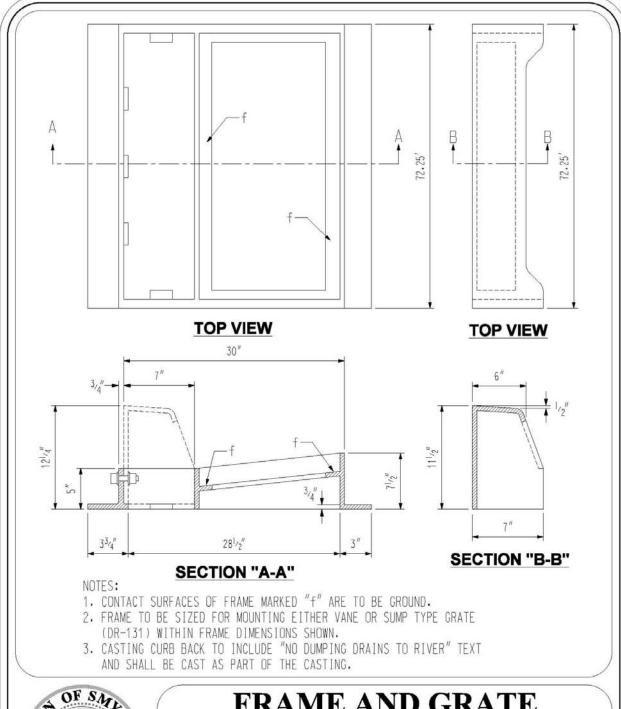
NOTES:

- 1. FRAME AND GRATE SHOWN ARE FOR FLUSH MOUNTED INLET (DR-132).
 ACCEPTABLE SUBSTITUTES WHERE USE IS DIRECTED ARE DR-129, DR-130,
 DR-133, AND DR-134 AND DR-135 WITH REFORMING OF CONCRETE
 SLAB FOR FRAME INSTALLATION.
- 2. TYPE I INLETS TO BE INSTALLED ON RCP ONLY. INSTALLTION ON OTHER TYPES OF PIPE MATERIALS IS NOT ALLOWED.



TYPE I INLET

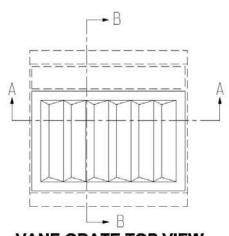
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DATE:	5/02/2008		



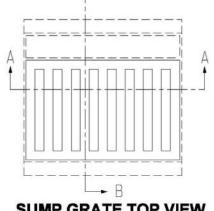


FRAME AND GRATE FOR VERTICAL CURB WITH GUTTER

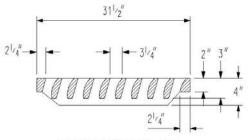
REVISION:	0	
DATE:	5/02/2008	



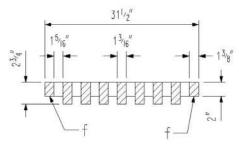
VANE GRATE TOP VIEW



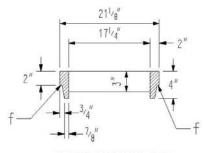
SUMP GRATE TOP VIEW



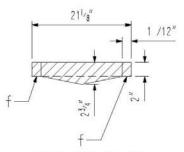
SECTION "A-A"



SECTION "A-A"



SECTION "B-B"



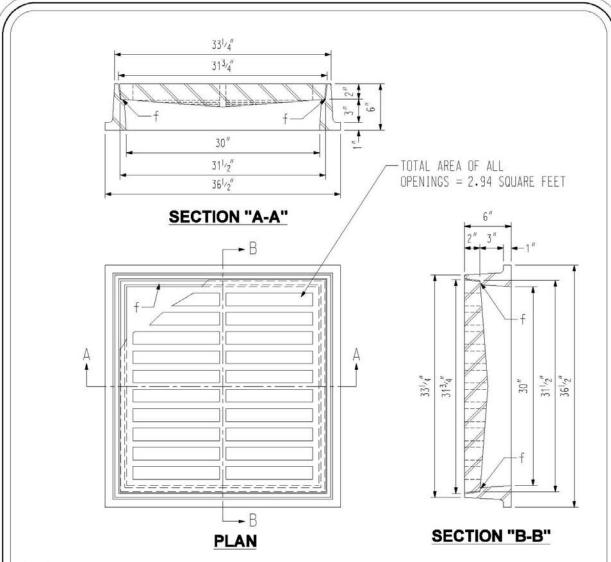
SECTION "B-B"

- 1. CONTACT SURFACES OF FRAME MARKED "F" ARE TO BE GROUND.
- 2. VANE AND SUMP GRATES TO BE JOHN BOUCHARD & SONS OR AN APPROVED EQUAL.



VANE AND SUMP GRATES

REVISION:	0		
DATE:	5/02/2008		

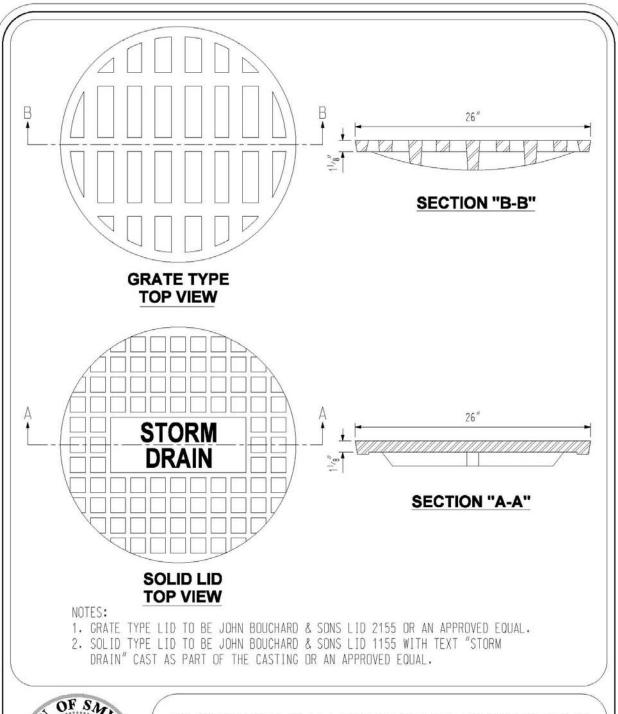


- 1. OMIT BASE FLANGE ON ONE SIDE OF FRAME FOR DOUBLE INSTALLATIONS AND END FRAMES OF OTHER MULTIPLE INSTALLATIONS. OMIT ON (2) TWO SIDES (OPPOSITE) FOR CENTER UNITS OF MULTIPLE INSTALLATIONS. FOR INSTALLATION WITH CURB INLETS, OMIT BASE ON ONE SIDE OF SINGLE, TWO ADJACENT SIDES OF DOUBLE. AND THREE SIDES OF CENTER UNITS OF OTHER MULTIPLE INSTALLATIONS.
- 2. CONTACT SURFACES OF FRAME AND GRATE MARKED "f" ARE TO BE GROUND.



FRAME AND GRATE FOR FLUSH MOUNTED INLETS

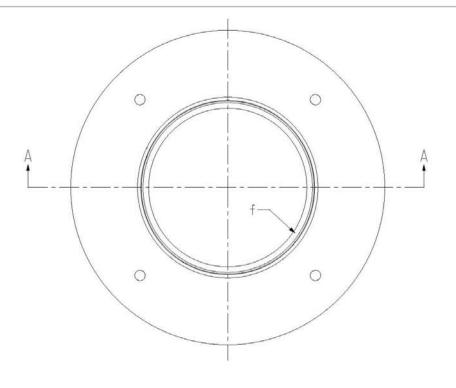
REVISION:	0		
DATE:	5/02/2008		

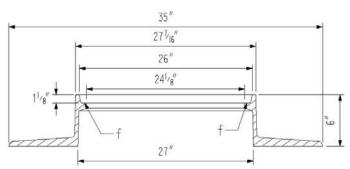




ROUND MANHOLE COVERS (GRATE & SOLID TYPE)

REVISION:	0		
DATE:	5/02/2008		



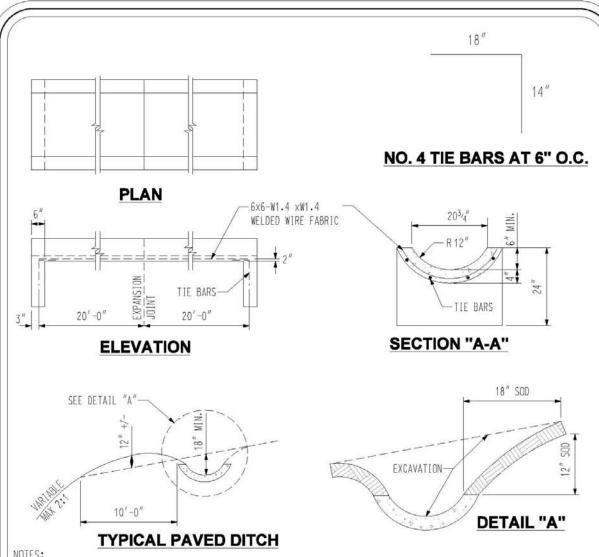


- 1. CONTACT SURFACE OF FRAME MARKED "f" IS TO BE MACHINED.
- 2. FRAMES TO BE JOHN BOUCHARD & SONS FRAME 1155/2155 OR AN APPROVED EQUAL.
- 3. SEE DETAIL SHEET "ROUND MANHOLE COVERS" FOR REFERENCE OF MANHOLE COVERS AND GRATES.



ROUND MANHOLE FRAME

REVISION:	0		
DATE:	5/02/2008		

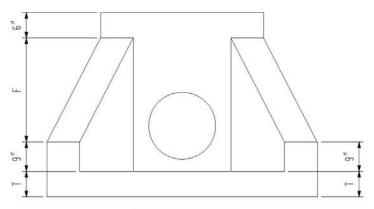


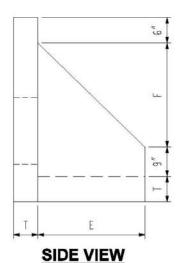
- 1. COMPACTION, FINISHING, AND CURING SHALL BE THE SAME AS REQUIRED FOR CONCRETE SIDEWALK WITH 4" STONE BASE.
- 2. IF CONTRACTOR ELECTS TO USE A CONSTRUCTION JOINT IN THE POURING OF THE PAVED DITCH, IT SHALL BE CONSTRUCTED
- 3. ANY LENGTH OF LONGITUDINAL REINFORCING STEEL WILL BE PERMITTED PROVIDED A 12" LAP IS USED IN THE SPLICE. ADEQUATE TIES AT THE SPLICE SHALL BE REQUIRED.
- 4. EXPANSION JOINTS REQUIRED ON 20' CENTERS.
- 5. SHOULD THE TERRAIN OF EXISTING GROUND BE SO THAT WATER WOULD DRAIN INTO THE DITCH FROM BOTH SIDES, THEN SODDING WILL BE REQUIRED ON BOTH SIDES OF THE DITCH.



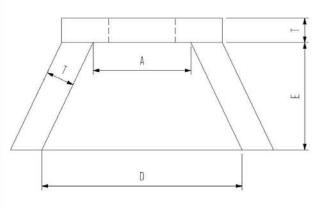
DITCH DETAIL (SMALL SECTION)

REVISION:	0		
DATE:	5/02/2008		





FRONT VIEW



TO		1/1	
10	_	vi	••

TABLE OF DIMENSIONS					
PIPE SIZES	А	D	Е	F	T (MIN.)
15"	2'-6"	5'-0"	2'-6"	1'-9"	6"
18"	2'-6"	5'-0"	2'-6"	1'-9"	6"
21"	2'-6"	5'-0"	2'-6"	1'-9"	6"
24"	4'-0"	6'-6"	4'-0"	3'-3"	6"
30"	4'-0"	6'-6"	4'-0"	3'-3"	6"
36"	5'-6"	8'-0"	3'-6"	4'-5"	6"
42"	5'-6"	8'-0"	3'-6"	4'-5"	6"
48"	5'-6"	8'-0"	3'-6"	4'-5"	6"
54"	7'-0"	9'-5"	4'-6"	5'-9"	6"
60"	7'-0"	9'-5"	4'-6"	5'-9"	6"
66"	8'-6"	11'-0"	5'-6"	6'-11"	6"
72"	8'-6"	11'-0"	5'-6"	6'-11"	6"

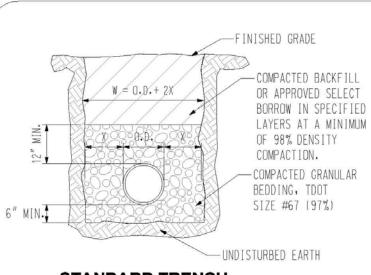
NOTES:

- 1. CONCRETE: 4,000 PSI AT 28 DAYS REINFORCED WITH NO. 4 BARS 10" C/C EACH WAY WITH WINGS AND TOE SLAB DOWELED TO HEADWALL WITH NO. 5 BARS.
- 2.3/4" CHAMFER ON ALL EXPOSED EDGES.



CONCRETE HEADWALL

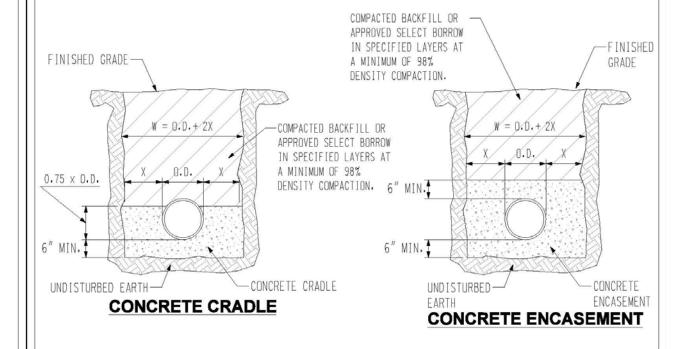
REVISION:	0		
DATE:	5/02/2008		



X
**
12"
15"
18"

**TRENCH WIDTH (W) SHALL BE 3'-0" MAX.
WIDTH OF TRENCH (W)=0.D. + 2X WHERE
X IS DISTANCE FROM OUTSIDE OF PIPE
TO EDGE OF TRENCH.

STANDARD TRENCH





TRENCH BACKFILL

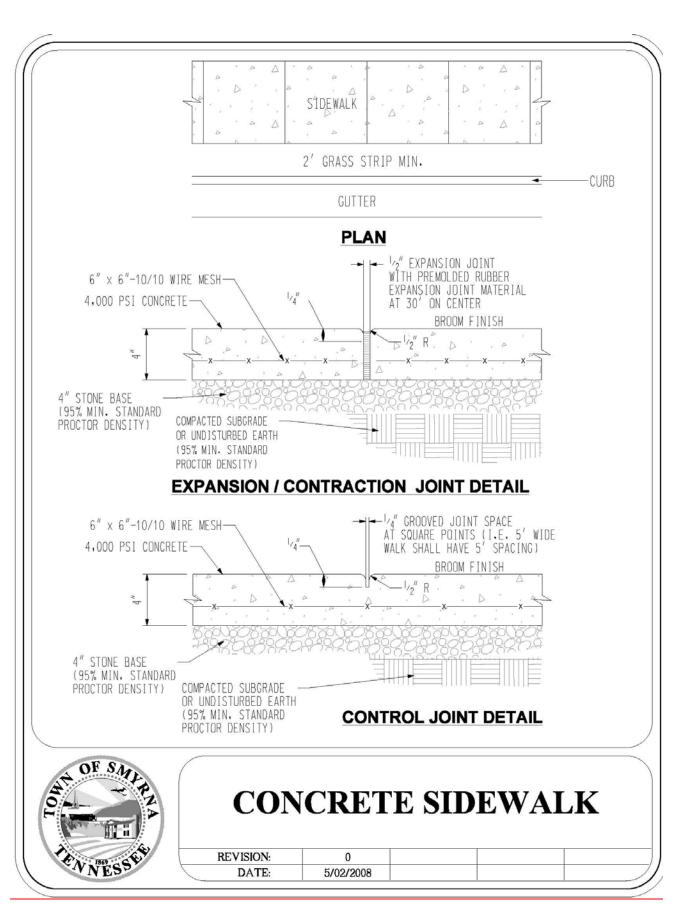
REVISION:	0		
DATE:	5/02/2008		

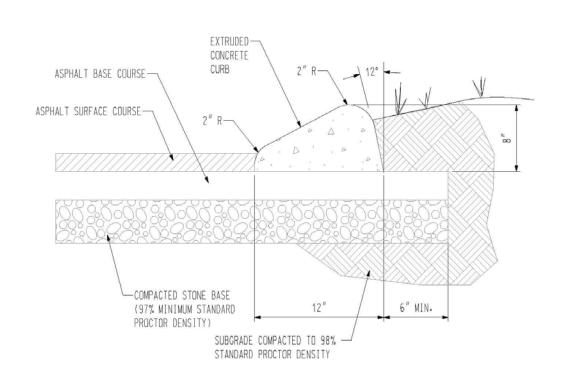
- 1. CONCRETE FOR CRADLES AND ENCASEMENTS TO HAVE f'c=3,000 PSI AT 28 DAYS.
- 2. POUR CONCRETE AGAINST UNDISTURBED EARTH.
- 3. FOR CONTINUOUS CONDUIT IN TRENCH CONDITIONS THE WIDTH OF TRENCH (W) SHALL BE 0.D.+2X MAX.
- 4. THE WIDTH OF TRENCH FOR ALL OTHER PIPE DIAMETERS SHALL BE ACCORDING TO TABLE 3.
- 5. BACKFILL IN NEW AND EXISTING ROADWAYS SHALL BE FULL TRENCH DEPTH GRADING D PUG MILL MIX COMPACTED (MINIMUM 97% STANDARD PROCTOR DENSITY) IN 8" LAYERS UP TO THE BOTTOM OF THE PAVEMENT SECTION.
- 6. AN ALTERNATE BACKFILL SHALL CONSIST OF STONE BEDDING AND COVER AS INDICATED IN THE STANDARD "TRENCH BACKFILL" DETAIL WITH SUITABLE BACKFILL MATERIAL COMPACTED TO 98% DENSITY. THE SUITABLE BACKFILL MATERIAL SHALL BE APPROVED BY THE PUBLIC WORKS DIRECTOR OR HIS DESIGNEE AND SHALL BE PLACED IN 8" COMPACTED LIFTS.



TRENCH BACKFILL NOTES

REVISION:	0		
DATE:	5/02/2008		



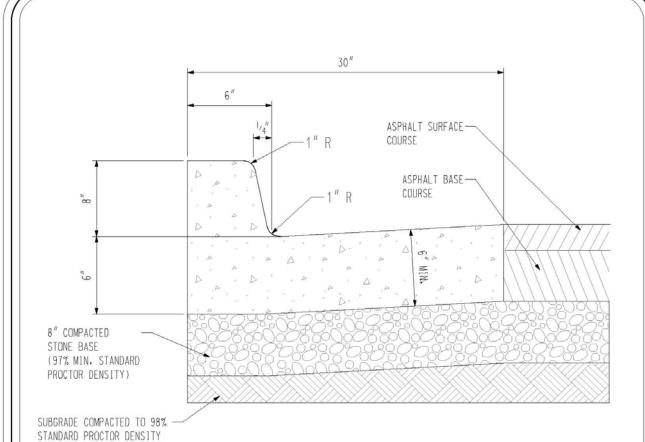


- 1. CONTRACTION JOINTS SHALL BE 1/2" WIDE AND FULL DEPTH. JOINTS SHALL BE PLACED AT A MAXIMUM OF 50 FEET LONGITUDINAL INTERVALS AND AT ALL ABUTTING STRUCTURES, DRIVEWAYS, AND TANGENT POINTS OF RADIUS RETURNS.
- 2. TOOLED CURB CONTROL JOINTS SHAL BE PLACED 1/4" WIDE, 1" DEEP, AND 5 FEET ON CENTER
- 3. ALL CONCRETE TO COMPLY WITH ACI 318 WITH A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI AT THE 28 DAYS TEST.
- 4. CONCRETE TO BE AIR-ENTRAINED WITH AN AIR CONTENT OF 4-6%.
- 5. JOINTS TO BE FILLED WITH BITUMINOUS EXPANSION MATERIAL.
- 6. UTILIZE JOHN BOUCHARD AND SONS CASTING NUMBER 3103.



8" EXTRUDED CONCRETE CURB

REVISION:	0		
DATE:	3/24/2009		

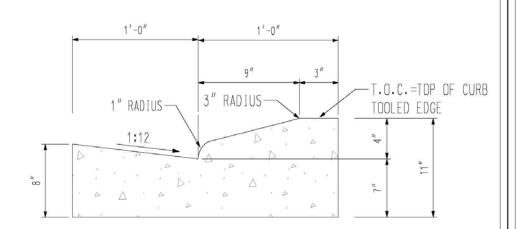


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- 5. JOINTS TO BE FILLED WITH BITUMINOUS EXPANSION MATERIAL.



STANDARD CURB AND GUTTER

REVISION:	0		
DATE:	5/02/2008		



- 1. CONTRACTION JOINTS SHALL BE 1/2" WIDE AND FULL DEPTH. JOINTS SHALL BE PLACED AT A MAXIMUM OF 50 FEET LONGITUDINAL INTERVALS AND AT ALL ABUTTING STRUCTURES, DRIVEWAYS, AND TANGENT POINTS OF RADIUS RETURNS.
- 2. TOOLED CURB CONTROL JOINTS SHAL BE PLACED 1/4" WIDE, 1" DEEP, AND 5 FEET ON CENTER
- 3. ALL CONCRETE TO COMPLY WITH ACI 318 WITH A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI AT THE 28 DAYS TEST.
- 4. CONCRETE TO BE AIR-ENTRAINED WITH AN AIR CONTENT OF 4-6%.
- 5. JOINTS TO BE FILLED WITH BITUMINOUS EXPANSION MATERIAL.
- 6. 18" FRAME AND GRATE REQUIRED, UTILIZE JOHN BOUCHARD AND SONS CASTING NUMBER 2240D FRAME AND GRATE, AND JOHN AND BOUCHARD CASTING NUMBER 3104-V CURB BACK.



ROLLOVER CURB WITH GUTTER

REVISION:	0		
DATE:	3/20/2009		

Road Construction Specifications 6-302

	Right of Way <u>Width</u>	Base <u>Width</u>	Base <u>Thickness</u>	Surface Course <u>Width</u>	Total Pavement <u>Thickness</u>
Residential Roads					
Neighborhood Minor	50'	25'	8"	22'	4 1/2"
Neighborhood Collector		27'	8"	24'	4 1/2"
Collector	60"	27'	8"	24'	4 1/2"
Arterial					
2 Lane	80'	33'	8"	28'	7 1/2"
3 Lane	80'	41'	8"	36'	7 1/2"
4 Lane	90'	53'	8"	48'	7 1/2"
5 Lane	105'	65'	8"	60'	7 1/2"
Nonresidential Roads					
Minor	50'	33'	8"	28'	4 1/2"
Collector	60'	35'	8"	30'	4 1/2
Arterial			-		·
2 Lane	80'	33'	10"	28'	7 1/2"
3 Lane	80'	41'	10"	36'	7 1/2"
4 Lane	92'	53'	10"	48'	7 1/2"
5 Lane	105'	65'	10"	60'	7 1/2"

Notes:

Curb and gutter width is excluded from surface coarse width.
 Surface coarse width shall be asphalt pavement width.

SECTION IV. MATERIALS SPECIFICATION AND CONSTRUCTION PROCEDURES

6-401 Preliminary Work

6-401.1 Location and Protection of Underground Utilities - Prior to beginning excavation or grading, the subdivider shall determine, insofar as possible, the actual locations of all underground utilities in the vicinity of his operations and shall clearly mark them so that they can be avoided by equipment operators. Subdivider shall contact Tennessee One-Call at 1-800-351-1111 or 811 to assist in these locations. Where such utility lines or services appear to lie in the path of construction, they shall be uncovered in advance to determine their exact location and depth and to avoid damage due to excavation or grading operations. Existing facilities shall be protected during construction or removed and replaced in equal condition, as necessary.

Should any existing utility line or service be damaged during or as a result of the subdivider's operations, the subdivider shall take such emergency measures as may be necessary to minimize damage and shall immediately notify the utility agency involved. The subdivider shall then repair the damage to the satisfaction of the utility agency or shall pay the utility agency for making the repairs. In all cases the damaged structure shall be in as good or better condition as before the damage occurred.

- 6-401.2 <u>Surveying and Staking</u> The subdivider shall be responsible for his own surveys and establish his own grades unless otherwise directed by the enforcing officer.
- 6-401.3 Removal of Obstructions The subdivider shall be responsible for the removal, safeguarding, and replacement of fences, walls, structures, culverts, street signs, billboards, shrubs, mailboxes, or other obstructions which must be moved to facilitate construction. Such obstructions shall be restored to at least their original condition.
- 6-401.4 Clearing and Grubbing The subdivider shall be responsible for cutting, removing, and disposing of all trees, brush, stumps, roots, and weeds within the construction area. Bush hogging, mowing, and tree cutting shall be considered clearing and grubbing. Stump and root removal and other soil disturbance shall require the issuance of a grading permit prior to beginning activity. Disposal shall be by means of chippers, landfills, or other approved methods not in conflict with state or local ordinances.

Care shall be taken to avoid unnecessary cutting or damage to trees not in the construction area. The subdivider shall be responsible for loss or damage to trees outside the permanent easement or rights-of-way.

6-401.5 Traffic Control and Safety - The subdivider shall provide and maintain access to and from all properties along the line of his work. The subdivider shall also provide temporary bypasses and bridges where necessary to route traffic and shall maintain them in a safe and usable condition whenever, in the opinion of the enforcing officer, detouring of traffic to parallel routes cannot be done without hardship or excessive increase in travel by the public.

Where single-lane bypasses are provided the subdivider shall furnish signalmen to control traffic operations and minimize delays.

The subdivider shall provide, erect, and maintain adequate barricades, warning signs, and lights at all excavations, closures, detours, points of danger, and uncompleted pavement in accordance with the Manual of Uniform Traffice Control Devices (MUTCD).

6-402 Roadway Construction

6-402.1 <u>Stripping, Stockpiling, and Placing Topsoil</u> - All topsoil shall be stripped within the street right-of-way and from any other area designated by the Director of Public Works. Topsoil shall be stored in stockpiles. All organic matter within the right-of-way shall be stripped and disposed of unless directed otherwise by the Director of Public Works.

A six (6) inch layer of topsoil shall be placed where seeding is required or where required by the enforcing officer.

After the stockpiled topsoil has been placed as specified above, the area where the topsoil was stockpiled shall be neatly graded and dressed.

6-402.2 Excavation - Excavation shall conform to limits indicated on the plans. Excavation materials shall be removed in such manner that the slopes can be neatly trimmed. Excavation shall not be made below grade except where rock or stone masonry is encountered or undercutting of unstable materials is required. Materials removed below grade shall be replaced with approved materials thoroughly compacted. Where borrow materials are required to complete embankments or fills the subdivider shall be responsible for providing them.

Rock excavation shall be removed to a minimum depth of twelve (12) inches below the subgrade and backfilled with approved materials which shall be thoroughly compacted.

Where a spring or seepage water is encountered that is not provided for on drainage plans it shall be reported to the Director of Public Works along with engineered drawings as to allow proper conveyance of water in accordance with TDEC requirements. 6-402.3 Fills and Embankments - Embankment and fill materials shall be free from frost, stumps, trees, roots, sod, or muck. Only materials from excavation or borrow pits, or other materials approved by the Director of Public Works shall be used. Materials shall not be placed on frozen ground.

Where excavated materials are used in fill construction and the materials consist of earth and various grades of rock, the fills shall be carefully constructed with the larger or hard rock on the bottom followed by the smaller or soft rock and finally the earth fill to provide a well-compacted and void-free embankment.

All depressions or holes below the natural ground surface, whether caused by grubbing, rock removal, undercutting, or otherwise, shall be filled with suitable materials and compacted to ground surface before fill construction is started.

Backfilling around a structure shall have been completed and thoroughly compacted to ground surface before any embankment materials are placed thereon.

Embankments shall be so constructed that adequate surface drainage will be provided at all times.

Fill areas located outside of the roadway shall be compacted by a sheep's foot roller, to a density of not less than ninety-five (95) percent Standard Proctor and each lift of fill materials shall be rolled until the roller "walk out".

The roadway finished grade shall be test rolled with a fully loaded tandem axle dump truck to be selected by the Director of Public Works. Any areas found to be soft or "pumping" shall be cut out and replaced with clean and machined 6" surge stone (minimum 12" depth) and 12" of compacted crushed pug mill mix installed in suitable compacted lifts, and each lift shall be compacted to minimum of ninety-eight percent (98%) and until the excavation has been brought back to finish grade. Limits of proof rolling with a fully loaded tandem axle dump truck shall be located at a point two (2) feet behind the curb.

Fill materials shall be placed in eight (8) inch lifts, maximum thickness. Where excavated materials consist mainly of rock too large to be placed in the normal eight (8) inch thickness crushing or further breaking down the pieces will be required. No rock larger than eight (8) inches in dimension shall be placed in fill. Care shall be taken to fill all voids between large rocks and to assure that fill materials are compacted such that settling does not occur.

Backfill around structures shall be of crushed stone where located within the roadway. Suitable earth/soil meeting the approval of the Director of Public Works or designee may be utilized around structures located outside of the roadway. All fill shall be placed and compacted in eight (8) inch lifts and brought up evenly on all sides of the structure. 6-402.4 <u>Undercutting</u> - This work shall consist of the removal and disposal of unsatisfactory materials below grade in cut sections or areas upon which embankments are to be placed. It shall also include undercutting for pipes and box culverts where required.

Known areas to be undercut shall be designated on the materials approved by the Director of Public Works. The backfill materials shall be placed in eight (8) inch lifts and compacted as specified for fill construction.

Disposal of unsatisfactory materials shall be approved by the Director of Public Works.

6-402.5 <u>Subgrade Construction and Preparation</u> - The subgrade shall be prepared in reasonably close conformity with the lines and grades as shown on the plans. Centerline and curb and gutter offset stakes must be in place and set by the developer prior to proof rolling of subgrade and base stone. Blue-top markers must be set by the developer and in place on the base stone prior to proof rolling.

Grading of subgrade shall be performed in such manner as to provide positive drainage of water. Ditches and drains shall be maintained to provide proper drainage during construction.

Hauling over finished subgrade shall be limited to that which is essential for construction purposes, and all ruts or rough places that develop in a completed subgrade shall be smoothed and recompacted. Soft areas shall be removed and replaced with crushed stone or as directed by the Director of Public Works.

The subgrade shall have a six-inch crown at the roadway centerline, or as otherwise specified by the Director of Public Works. Subgrade and base stone, in addition to compaction requirements, shall be proof rolled and observed by a representative of the Director of Public Works with a fully loaded tandem axle dump truck.

Subgrade density tests, when required by the Director of Public Works, shall be conducted by a local testing laboratory, approved by the Town and licensed by the State of Tennessee, being furnished at the expense of the developer/owner and two copies of said reports submitted directly to the Director of Public Works. The developer/owner shall request in writing to the Director of Public Works when (the date envisioned) any inspection by the Director of Public Works of the subgrade is desired. A minimum of one subgrade density test for every constructed subdivision street and/or one thousand (1,000) feet of roadway therein shall be required.

The subgrade must be compacted to at least 98% of its maximum dry density as determined by ASTM-D-698 (Standard Proctor).

It shall be the responsibility of the Director of Public Works to decide after the filing of the request for inspection by said developer/owner, the

location of all test area(s) as well as the time or date the testing by an approved testing laboratory shall be conducted.

The developer/owner shall be responsible for reimbursing the Town for all costs engendered by the Director of Public Works, with respect to the evaluation of the test site(s), as well as the required laboratory testing report.

Any areas identified as failing the proof rolling or compaction tests shall require undercutting to undisturbed soil with placement of clean machined 6" surge stone (12") minimum thickness) and capped with 12" crushed stone pug mill mix (12") minimum thickness) compacted to 97% in 4" layers. The Director of Public Works may review and approve other methods to correct these problems.

If the findings of the test report requires any repetition of such test is required, the cost of such test, as well as the test and subgrade review fees of the Director of Public Works shall be borne solely by the project developer/owner.

The subgrade shall be approved by the Director of Public Works for adherence to the plans before any base materials are placed.

6-402.6 Shoulders and Slopes - All shoulders and slopes shall be trimmed and shaped to conform with the cross sections shown on the plans and as specified in Section 6-403.3. Rock cuts shall be sealed of all loose fragments, projecting points, etc., so as to leave a clean and neat appearance. Shoulders shall be completed where required as shown on the plans and shall be double bituminous surface treated, with care being taken to protect the surface and edges of pavement. Shoulder materials shall be placed in uniform layers and compacted by overlapped rolling of both base course and pavement. The finished shoulder shall be part of the pavement (binder and topping).

6-403 Base and Paving

6-403.1 <u>Base Stone</u> - The base course of stone shall be placed and compacted to 97% in layers or lifts upon the prepared and compacted subgrade (98%) to a finish thickness as described and shown on the plans. No single layer or lift shall exceed four (4) inches in depth.

The base course shall be a pugmill mix of mineral aggregate conforming to the technical specifications set forth in Section 303 of TDOT Standard Specifications. The aggregate base shall not be spread on a subgrade that is frozen or that contains frost. The base shall be placed and spread in uniform layers or lifts without segregation of size; each layer shall be compacted to a thickness no greater than four (4) inches. The stone shall be mixed with graders or other equipment until a uniform mixture is obtained. Each layer shall be compacted by rolling with alternate blading until a smooth, even, and uniformly compacted finish is obtained.

The base stone shall be graded and rolled while it is still moist from the pugmill mix. If the enforcing officer determines that the mix is too dry, water shall be added with a distributor tank truck while the stone is being graded and rolled. Compaction shall be uniform for the entire width of the ⁶roadway until a density of ninety-seven percent (97%) of the solid volume has been achieved. Placement and compaction of each layer shall be approved by the Director of Public Works (or designee) before materials for the next successive layer are placed.

No pavement shall be placed until the stone base has been approved by the Director of Public Works (or designee).

6-403.2 Prime Coat - After the base stone has been prepared as outlined above, a bituminous prime coat shall be applied uniformly over the surface of the base by the use of an approved bituminous distributor. The prime coat shall be applied at the rate of the three-tenths (3/10) gallon per square yard, using Grade RC-70 or RC-250, or refined tar Grade RT-2, RT-3, or emulsified asphalt, Grade AE-P. If, after the bituminous materials have been applied, they fail to penetrate before the time that the roadway is to be used by traffic, dry cover materials shall be spread at a rate established by the Director of Public Works, (between eight (8) and twelve (12) pounds per square yard) to prevent damage to the primed surface. An excess of cover materials shall be avoided. No succeeding state of construction shall be placed upon the prime coat until it has properly cured. Aggregate for cover materials shall be Size No. 7 or 8.

In addition to these general requirements, unless otherwise stipulated, all materials and methods of installation shall conform to the technical specifications set forth in Section 402, <u>Standard Specifications</u>.

- 6-403.3 Tack Coat A tack coat shall be applied to old or existing pavement surface or to a previously prepared base or surface to provide bond for an overlaid course. The tack coat shall be applied at the rate of one-tenth (1/10) gallon per square yard using materials and methods of installation set forth in Section 403, <u>Standard Specifications</u>.
- 6-403.4 Base Course Upon completion of the prime coat, and asphaltic concrete base (hot mix) course shall be applied. The base course shall be the thickness shown on the detail sheet and as specified in the subdivision regulations. All materials and methods of installation shall conform to the technical specification set forth in Section 307, Standard Specifications for asphaltic concrete base. The asphaltic base shall be constructed of Grade B modified (BM) materials described in Section 307.03, Standard Specifications. The Town shall be notified of the intent to install the base course at least forty-eight (48) hours prior to the beginning of work.
- 6-403.5 <u>Wearing Surface</u> The wearing surface shall be applied upon the asphaltic base course after the application of the tack coat. The wearing

surface shall be the thickness shown on the detail sheet and as specified in the Subdivision Regulations. All materials and methods of installation shall conform to the technical specifications set forth in Sections 411 and 307, Standard Specifications for asphaltic concrete surface. The wearing surface shall be constructed of Grade D, E and CW materials described in Section 903.11, Standard Specifications, and shall utilize asphaltic cement Grade RT-4 or 5, or TRCB-5 or 6, as set forth in Section 904, Standard Specifications. The wearing surface shall not be installed until at least seventy-five (75) percent of the buildings (residences, commercial buildings, etc.) associated with this subdivision are complete. The Town shall be notified of the intent to install the wearing surface at least forty-eight (48) hours prior to the beginning of work. Milling shall be required at transition areas and/or phase connection points of subdivisions. Milling of the existing topping shall be performed as to allow a true transition of the new topping layer.

6-403.6 Shoulders - Shoulder construction shall be completed by bleeding. moistening as necessary, and by thoroughly compacting. The shoulders shall be the width and thickness shown on the typical section as required herein and covered with a double bituminous surface treatment. The surface shall be prepared as directed in advance of the surface construction. Upon completion of the prime coat, a double bituminous surface treatment shall be applied with the first course being at a rate of between 0.38 and 0.42 gallons per square yard. If the width of application is wider than the distributor, each width of spread shall not be less than one-half (1/2) the surface to be treated. Areas inaccessible to the distributor shall be treated either with hand sprays or pouring pots. Immediately after each application of bituminous materials has been made, it shall be covered uniformly with Size No. 6, mineral aggregate. The aggregate shall be spread at a rate of between thirty (30) and forty (40) pounds per square yard. This first application shall be allowed to cure for a length of time to be determined by the enforcing officer before the second application is begun.

The second application of bituminous materials shall be applied in the same manner as the first application, at a uniform rate between 0.30 and 0.35 gallons per square yard. Mineral aggregate, Size No. 7, shall then be spread in the same manner as for the first spread at a rate between twenty (20) and twenty-five (25) pounds per square yard.

Immediately after each spread of cover aggregate, uniform coverage shall be achieved by hand brooming. Additional aggregate shall be placed by hand on thin or bare areas.

Immediately after spreading and brooming the cover aggregate, the entire surface shall be rolled, beginning at the edges and progressing to the edge of the pavement. Rolling shall begin within thirty (30) minutes after the aggregate has been spread. The same rolling and curing procedures required in making the first application shall be repeated in making the second application.

In addition to these general requirements, unless otherwise stipulated, all materials and methods of installation shall conform to the technical specifications set forth in Section 404, Standard Specifications.

6-404 <u>Drainage System Design</u>

- 6-404.1 <u>Ditching and Channelization</u> This work shall consist of the construction of ditches adjacent to roadway shoulders and feeding to and from culverts under or adjacent to the roadway. All drainage ditches shall be graded in their entirety during the time the roadways are being graded and such grading shall be completed prior to final inspection of the roadways.
- 6-404.2 <u>Stabilization of Ditches</u> All open ditches shall be stabilized in accordance with the following requirements:

Size of Neare Culvert (Upstream)	st Seeding Required	Sod Required	To be Concrete Lined
45"	Grades	Grades	Grades Exceeding
15"	1.00%-3.00%	3.00%-12.00%	12.00%
	Grades	Grades	Grades Exceeding
18" thru 24"	1.00%-1.50%	1.50%-7.00%	7.00%
	Grades	Grades	Grades Exceeding
30" thru 36"	1.00%-1.50%	1.00%-4.00%	4.00%
	Grades	Grades	Grades Exceeding
42" thru 72"	Grades	2.50% or Less	2.50%

6-404.3 Concrete Ditch Paving - Concrete ditch paving shall consist of the construction of paved ditches on a prepared subgrade. The subgrade shall be shaped and compacted to a firm even surface. All soft materials shall be removed and replaced with acceptable materials and shall be compacted as directed by the enforcing officer.

Concrete ditch pavement shall be four (4) inches in thickness throughout and shall be backfilled immediately after the concrete has set and the forms have been removed. The backfilled materials shall be thoroughly compacted. Expansion joints shall be located as directed by the Director of Public Works.

6-404.4 <u>Culverts and Storm Drains</u> - This work shall consist of the construction of pipe culverts and storm sewers as shown on the plans.

Driveway culverts shall be a minimum diameter of eighteen (18) inches and a minimum length of sixteen (16) feet; cross drains shall be a minimum diameter of eighteen (18) inches.

Reinforced concrete pipes shall conform to minimum standards for Class III, Reinforced Pipes, A.S.T.M. C76. Corrugated metal pipes shall conform to Section 915.02 or 915.04, <u>Standard Specifications</u> and to gage as follows:

Pipe Selection Criteria Based on System and Fill Height¹³

	≤ 10 ft	> 10 ft and ≤ 18 ft	> 18 ft and ≤ 27 ft	> 27 ft and ≤ 41 ft	> 41 ft
Freeways					
Cross drains	RCP CL III	RCP CL III	RCP CL IV	RCP CL V	Note 1.
Transverse median drains	RCP CL III	RCP CL III	RCP CL IV	RCP CL V	Note 1.
Longitudinal storm drains	RCP CL III	RCP CL III	RCP CL IV	RCP CL V	Note 1.
Arterials					
Cross drains	RCP CL III	RCP CL III	RCP CL IV	RCP CL V	Note 1.
Transverse median drains	RCP CL III	RCP CL III	RCP CL IV	RCP CL V	Note 1.
Longitudinal storm drains	RCP CL III	RCP CL III	RCP CL IV	RCP CL V	Note 1.
Collectors					
Cross drains	RCP CL III	RCP CL III	RCP CL IV	RCP CL V	Note 1.
Transverse median drains	RCP CL III	RCP CL III	RCP CL IV	RCP CL V	Note 1.
Longitudinal storm drains	RCP CL III	RCP CL III	RCP CL IV	RCP CL V	Note 1.
Local Roads ≥ 1000 ADT					
Cross drains	RCP CL III	RCP CL III	RCP CL IV	RCP CL V	Note 1.
Storm drains	RCP CL III	RCP CL III	RCP CL IV	RCP CL V	Note 1.
Local Roads < 1000 ADT					
Cross drains	RCP CL III	RCP CL III	RCP CL IV	RCP CL V	Note 1.
Storm drains	RCP CL III	RCP CL III	RCP CL IV	RCP CL V	Note 1.
Side Drain Pipes	RCP CL III	RCP CL III	RCP CL IV	RCP CL V	Note 1.
(Pipes under private	CMP 16g	CMP 14g	CMP 14g	CMP 14g	
drives,	Note 2.				
business or field					
entrances)					
Longitudinal Median	RCP CL III	RCP CL III	RCP CL IV	RCP CL V	Note 1.
Drains	16g note 2.				
(All Systems) Grassed					
Depressed Medians					

Note 1. Structural, hydraulic, and cost analysis required for pipes with a fill height over 41 feet.

Note 2. The minimum cover for design loads shall be not less than 12-inches. The minimum cover shall be measured from the top of the rigid pavement or the bottom of the flexible pavement.

For pipes smaller than forty-eight (48) inches in diameter, a minimum cover of one (1) foot, exclusive of base and paving, is required from top of pipes to finished subgrade. A minimum cover of two (2) feet is required for pipes forty-eight (48) inches in diameter and larger. All pipes shall be built on straight line and grade and shall be laid with the spigot end pointing in the direction of the flow, with the ends fitted and matched to provide tight joints and smooth uniform invert.

Pipes shall be bedded on a six (6) inch thickness of Class B materials and backfilled to a depth of thirty (30) percent of the diameter of the pipes. Recesses shall be dug in the bedding materials to accommodate the bell. Class B bedding shall be Size No. 7, as shown in Chart No. 903.23, <u>Standard Specifications</u>. Culverts and storm drains in existing roadways shall be backfilled to the depth of the cut.

All open cut excavation trenches utilized to install utilities, piping, etc. (and areas as identified by the Public Works Director's representative) located within the roadway, shoulder, subgrade, and base areas shall be completely backfilled with either approved suitable subgrade material (at maximum lift thicknesses of 8" and compacted to 98% standard proctor density) or TDOT No. 67 stone. If approved suitable materials are used to backfill trench areas, then the contractor shall retain (at his expense) a certified getotechnical engineer registered in the State of Tennessee to perform compaction tests at a maximum distance of 500 feet on each 8" lift or at lesser intervals as may be directed by the Public Works Director's representative. All roadway base areas shall be completely backfilled with TDOT No. 67 mineral aggregate stone. The top 12" of the trench area's stone backfill shall consist of compacted Class A Grade D crushced stone compacted to 98% standard proctor density.

- 6-404.5 <u>Headwalls</u> Concrete headwalls shall be constructed at both ends of cross drains as shown and detailed on the standard drawings included herein.
- 6-404.6 Catchbasins This work shall consist of constructing catchbasins complete with inlets, outlets, and inverts. Tops and inlets shall be constructed to conform to the roadway grade so that drainage can easily be caught and no ponding created. Catchbasins shall be constructed as shown and detailed on the standard drawings contained herein.
- 6-404.7 <u>Box Culverts and Bridges</u> Design of box culverts and bridges shall be submitted to the enforcing officer for approval before any construction is permitted.
- 6-404.8 Roadside Ditches Roadside ditches, in conventional sections, shall be built to a grade that will permit good drainage, and in no case shall the slope of the ditch be less than one percent (a fall of

- 1.00 foot in 100 feet). All drainage ditches shall be stabilized to prevent erosion as indicated in these specifications.
- 6-404.9 Changes in Water Channels Where the subdivider rechannelizes water through a subdivision he will be responsible for replacing cross drains under public streets, as directed by the Director of Public Works. This work shall be done at the expense of the subdivider.
- 6-404.10 <u>Hydraulic Design</u>¹⁴ Storm water collection and conveyance systems for proposed developments shall be designed with sufficient hydraulic capacity for the 25 year storm frequency. Minor and collector roadway systems shall be designed for the 25-year storm frequency. Arterial roadway systems shall be designed for the 50-year storm frequency with the 100-year storm frequency studied to ensure water does not overtop the roadway and does not impact upstream properties as a result of inlet backup water.
- 6-404.11 Storm Water Detention 15 Storm water detention design and calculations shall provide adequate detention volume and freeboard within the detention basin for both the 0.5 inch first flush volume and the 25-year storm frequency volume, based on the post development runoff rates. The detention basin calculations shall include the study of routing a 50-year storm frequency through an emergency overflow or by other means as to ensure flooding of the adjacent structures and properties does not occur. The detention basin discharge structure shall be designed as to regulate the post development runoff rate based on the 2, 5, 10, and 25-year storm frequencies by means of a circular orifice, a non-circular orifice, a rectangular weir, a trapezoidal weir, a triangular weir, a "V"-notch weir, culvert entrance control structure, or riser overflow opening. The post development discharge rate for the 2, 5, 10, and 25-year storm frequencies shall not exceed the pre-development runoff The detention basin design and calculations shall also include any offsite drainage areas contributing to the collected runoff of the proposed developed site, if routed through the detention basin. All components of the detention basin design shall also be in accordance with the Town of Smyrna's National Pollution Discharge Elimination System (NPDES) General Permit Application for Municipal Separate Storm Sewer System (MS4) Phase II Program and the Town of Smyrna's Dry Detention Basin Policy.

6-405 Final Dressing, Seeding, and Sodding

6-405.1 Final Dressing - This work shall consist of dressing all slopes and areas to within reasonable close conformity to the lines and grades indicated on the plans, or as directed by the Director of Public Works. Final dressing shall be performed by hand or machine to produce a uniform finish to all parts of the roadway including embankments, ditches, etc. Rock cuts shall be cleaned of all loose fragments; side slopes shall be laid back to a three to one (3:1) slope and seeded as described in these specifications.

The entire right-of-way shall be cleaned of all weeds and brush and all structures both old and new shall be cleared of all brush, rubbish, sediment, or other objectionable materials.

6-405.2 Seeding - In all areas damaged or disturbed by the construction operation where established ground cover was present before beginning of construction, the subdivider shall be responsible for restoring the ground cover after completion of construction, unless noted otherwise on drawings. All areas seeded shall be graded smooth prior to seeding and the subdivider shall be responsible for maintenance of the smooth finished grade until grass is established.

After designated areas have been carefully hand graded, soil shall be prepared for fertilizing and seeding. Fertilizer shall be a standard commercial fertilizer Grade 15-15-15 or equivalent, and shall be applied at a rate of not less than ten (10) pounds per one thousand (1,000) square feet. The fertilizer shall be lightly harrowed, raked, or otherwise incorporated into the soil for a depth of approximately one half (1/2) inch. The subdivider shall be responsible for any regrading or reseeding required to produce an acceptable grass cover. Rutting and washing shall be restored by reseeding and strawing; in areas of extreme erosion sodding may be required.

The seed shall be as follows:

<u>Name</u>	Percent by Weight
Lespedeza	20
Sericea Lespedeza	15
Kentucky 31 Fescue	40
English Rye	15
White Dutch Clover	5
Weeping Love Grass	5
Kentucky 31 Fescue	55
Redtop	15
English Rye	20
White Dutch Clover	5
Weeping Love Grass	5

The seed shall be sown uniformly at the rate of one and one-half (1 1/2) pounds per one thousand (1,000) square feet.

6-405.3 Sodding - Sodding shall consist of furnishing and placing sod at all locations shown on the plans, or as directed by the Director of Public Works. Work shall include the furnishing and placing of new sod, consisting of live, dense, well-rooted growth of permanent grasses free from Johnson grass and other obnoxious grasses or weeds, well suited for the soil on which it is placed. All sod shall be cleanly cut in strips having a uniform thickness of not less than two and one-half (2 1/2) inches. Sod shall be set when the soil is moist and favorable to growth. No setting shall be done between October

1 and April 1, without permission of the Director of Public Works. The area to be sodded shall be brought to the lines and grades shown on the plans, or as directed by the Director of Public Works.

The surface of the ground to be sodded shall be loosened to a depth of not less than one (1) inch with a rake or other device. If necessary, it shall be sprinkled until saturated for a minimum depth of one (1) inch and kept moist until the sod is placed. Immediately before placing the sod, fertilizer and lime shall be applied uniformly to the prepared surface of the ground. Fertilizer shall be applied at the rate of eight (8) pounds of Grade 15-15-15, or equivalent, per one thousand (1,000) square feet.

Sod shall be placed as soon as practical after removal from the point of origin; it shall be kept in a moist condition during the interim. Sod shall be carefully placed by hand on the prepared ground surface with the edges in close contact and, as far as possible, in a position to break joints. Each strip of sod laid shall be fitted into place and tamped. Immediately after placing, the sod shall be thoroughly wetted and rolled with an approved roller. On slopes of two to one (2:1) or steeper, pinning or pegging may be required to hold the sod in place.

The sod shall be watered for a period of two (2) weeks. The subdividershall not permit any equipment or materials to be placed on any planted area and shall erect suitable barricades and guards to prevent equipment, labor, or the public from traveling on or over any area planted with sod.

ASSURANCE FOR COMPLETION AND MAINTENANCE OF IMPROVEMENTS

7-101 <u>Improvements and Letters of Credit/Escrow Accounts</u>

- 7-101.1 Completion of Improvements -- Before the final subdivision plat is signed by the Planning Commission officer specified in Section 3-106.1 of these regulations, all applicants shall complete, in accordance with the Planning Commission's decision and to the satisfaction of the Director of Public Works and the Director of Utilities, all public way, sanitary, and other improvements, including lot improvements on the individual lots of the subdivision, as required in these regulations and approved by the Planning Commission, and shall dedicate such improvements to the governing body free and clear of all liens and encumbrances on the property and public improvements thus dedicated. To this end, "asbuilt" plans as discussed in Section 3-106.1(2) herein shall be approved by said Director of Public Works and the Director of Utilities. These "as-built" plans must be submitted prior to the release of the financial surety on the plat.
- 7-101.2 Surety Instrument 16 -- The Planning Commission at its discretion may waive the requirement that the applicant complete and dedicate all public improvements prior to the signing of the final subdivision plat by providing that, as an alternative, the applicant post a bond at the time of submission for final subdivision approval in an amount estimated by the Planning Commission as sufficient to guarantee to the governing body the satisfactory construction, installation, and dedication of the incomplete portion of required improvements.

Said estimate shall include an additional twenty percent (20%) over and above the cost of securing all necessary improvements to cover the increase in costs due to inflation or other factors over the bondable period. The letter of credit or escrow funds also shall secure all lot improvements on the individual lots of the subdivision as required in these regulations. The Town may dispose of funds in any manner deemed appropriate and available to remedy improvements not constructed to the specified standards.

A performance bond/agreement authorized by the Planning Commission shall be secured by either an irrevocable letter of credit or a cashier's check. The beneficiary of the surety shall be the Town of Smyrna. Such letter of credit shall comply with all statutory requirements and shall be satisfactory to the town attorney as to form, sufficiency, and manner of execution as set forth in these regulations. Accordingly, such letter of credit must be officially filed and approved on the appropriate form. Moreover, only commercial banks and federally chartered savings and loan associations located in Rutherford or Davidson County, Tennessee, shall be acceptable institutions for the issuance of letters of credit as required for the purposes of these regulations.

It shall be the responsibility of the Director of Public Works to establish the amount for roadway and drainage and the Director of Utilities to establish the amount for water and sewer improvements. The Town Planner shall establish the total amount based on the amounts calculated by the Director of Public Works and the Director of Utilities of all performance bonds or letters of credit. All such surety instruments shall be segregated into cost estimates for each specific type of improvements, i.e. streets, drainage, lot improvements, utilities, etc.

The period within which required improvements must be completed as assured through the use of a performance agreement and letter of credit shall be specified by the Planning Commission in the resolution approving the final subdivision plat and shall be incorporated in the agreement and letter of credit. This period shall be for one (1) year and shall not in any event exceed two (2) years from date of final approval. Moreover, whenever such agreement and letter of credit is extended according to these regulations, the price of completing all bondable improvements must be reanalyzed and established by the Planning Commission in order that the surety instrument be adequate to cover the cost of all improvements. Again, an additional twenty percent (20%) of the cost of securing all necessary improvements shall be added to this cost figure in order to insure that these improvements be properly installed in relation to the rate of inflation for the period of extension. Such agreement and letter of credit shall be approved by the Town Council or a designated representative as to amount, surety and conditions. The Planning Commission may recommend to the appropriate local legislative body, upon proof of difficulty, extension of the completion date set forth in such agreement and letter of credit (normally a one (1) year period) for a maximum period of one (1) additional year. The legislative body may accept, at any time during the period of such agreement and letter of credit, a substitution of principal or sureties on the agreement and letter of credit upon the recommendation of the Planning Commission.

- 7-101.3 Temporary Improvements -- The applicant shall build and pay for all costs of temporary improvements required by the Planning Commission, and shall maintain them to a reasonable satisfaction for the period specified by the Planning Commission. Prior to construction of any temporary facility or improvement, the applicant shall file with the governing body a separate suitable bond for temporary facilities, which shall ensure that the temporary facilities will be properly constructed, maintained, and removed.
- 7-101.4 Costs of Improvements -- All required improvements shall be made by the applicant at his expense. Any provisions for reimbursement

- by the governing body or any utility agency shall be stipulated clearly in the provisions of any bonds.
- 7-101.5 Governmental Units -- Governmental units to which these bonds and contract provisions apply may file, in lieu of said contract or bond, a certified resolution or ordinance from officers or agencies authorized to act in their behalf agreeing to comply with the provisions of this article.
- 7-101.6 Failure to Complete Improvements -- All cases in which a performance bond has been posted and required improvements have not been installed within the terms of such performance bond, the governing body thereupon may declare the bond to be in default and require that all the improvements be installed regardless of the extent of the building development at the time the bond is declared to be in default.
- 7-101.7 Acceptance of Dedication Offers -- Acceptance of formal offers of dedication of public ways, easements, and parks shall be by formal action of the governing body. Such action shall be in the form of a resolution recommended by the Planning Commission to the legislative body. The approval by the Planning Commission of a subdivision plat shall not be deemed to constitute or imply an acceptance by the local government of any public way, easement, or other ground shown on the plat. The Planning Commission may require the plat to be endorsed with appropriate notes to this effect. No formal offers of dedication shall be accepted until build-out of the development is 90% complete.

7-102 Inspection of Improvements

General Procedure 17 -- The Planning Commission may provide for 7-102.1 inspection of required improvements during construction and ensure their satisfactory completion. If the appropriate governmental representative finds upon inspection that any of the required improvements have not been constructed in accordance with the governing body's construction standards specifications, the applicant shall be responsible for completing the improvements to the required standards. Whenever the cost of improvements is covered by a performance bond, the applicant and the commercial bank or federally chartered savings and loan association shall be liable severally and jointly for completing said improvements according to specifications.

7-102.2 Release or Reduction of Performance Bond

7-102.201 Certificate of Satisfactory Completion - The governing body shall not accept dedication of required public improvements nor release nor reduce a performance bond until the Director of Public Works and the Director of Utilities submits a certificate stating that all required improvements have been satisfactorily completed, and until the applicant's engineer or surveyor has certified to the Planning Commission, the Director of Public Works and Director of Utilities (through

submission of a detailed "as built" plans of the subdivision indicating location, dimensions, and construction materials of all facilities improvements, and any other information required by the Planning Commission) that the layout and the line and grade of all public improvements are in accordance with the approved construction plans for the subdivision. Upon such approval and recommendation, the governing body, thereafter, may accept the dedicated improvements in accordance with the procedures set forth in Sections 1-109.106 and 7-101.7 of these regulations.

7-102.202 Reduction of Performance Bond -- A performance bond may be reduced upon actual dedication and acceptance of public improvements and then only to the ratio that the public improvement dedicated bears to the total public improvements for the plat. In no event shall a performance bond be reduced below twenty-five (25) percent of the principal amount prior to final acceptance of all items covered under the bond.

7-103 <u>Maintenance of Improvements</u> -- The applicant shall be required to maintain all improvements including all lot improvements, until acceptance of the public improvements by the governmental body.

The applicant may be required to file a maintenance bond with the governing body prior to dedication, in an amount considered adequate by the Director of Public Works and the Director of Utilities and submitted to the Town Planner and in a form satisfactory to legal counsel in order to assure the satisfactory condition of the required improvements, including all lot improvements, for a period of one year after the date of acceptance of the public improvements by the governing body. The minimum amount of a maintenance bond pertaining to public ways shall not be less than twenty percent (20%) of the total amount of the surety bond filed with the town to construct said public way.

7-104 <u>Deferral or Waiver of Required Improvements</u> -- The Planning Commission may defer or waive at the time of final approval, subject to appropriate conditions, the provision of any or all such improvements as, in its judgment, are not requisite in the interest of the public health, safety, and general welfare, or which are inappropriate because of inadequacy or lack of connecting facilities.

Whenever it is deemed necessary by the Planning Commission to defer the construction of any improvements required herein because of incompatible grades, future planning, inadequate or lack of connecting facilities, or for other reasons, the developer shall either pay his share of the costs of the future improvements to the governing body prior to signing of the final subdivision plat by the Planning Commission secretary or the Director of Public Works or the Director of Utilities or post a bond or other surety instrument ensuring completion of said improvements upon demand of the governing body.

7-105 Escrow Deposits for Lot Improvements

- 7-105.1 Acceptance of Escrow Funds -- Whenever, by reason of the season of the year, any lot improvements required by these regulations cannot be performed, the enforcing officer nevertheless may issue a certificate of occupancy upon accepting a cash escrow deposit in an amount to be determined by the appropriate governmental representative for the cost of such improvements; provided, there otherwise is no danger to the health, safety, or general welfare. The performance bond covering such lot improvements shall remain in full force and effect.
- 7-105.2 Procedures on Escrow Funds -- All required improvements for which escrow monies have been accepted by the enforcing officer at the time of issuance of a certificate of occupancy shall be installed by the developer within a period of nine (9) months from the date of deposit and issuance of the certificate of occupancy. In the event that the improvements have not been installed properly at the end of the time period, the enforcing officer shall provide written notice of two (2) weeks to the developer requiring him to install the improvements, and in the event they are not installed properly, in the judgment of the enforcing officer, he may request the governing body to proceed to install or to contract for the installation of the necessary improvements in a sum not to exceed the amount of the escrow deposit.

At the time of the issuance of the certificate of occupancy for which escrow monies are being deposited, the applicant shall obtain and file with the enforcing officer, prior to obtaining the certificate of occupancy, a notarized statement from the purchaser(s) of the premise authorizing the enforcing officer to install the improvements at the end of the nine month period in the event the improvements have not been installed properly by the developer.

7-106 <u>Issuance of Building Permits and Certificates of Occupancy</u> 18

- (1) Building permits for new lots within a subdivision shall not be issued until the final plat has been recorded as specified in Section 3-106.2 of these regulations. Furthermore, the public ways extending access to the new lots shall be improved to a minimum of having the base layer of pavement installed as well as the public water, sewer, and storm drainage facilities having been installed, inspected, and approved by the Director of Utilities or the appropriate utility district representative and the Director of Public Works or his designee. At the discretion of the Director of Public Works, building permits may be issued without the base layer of pavement being installed when the following conditions are met:
 - 1. The base layer of stone and all water, sewer, and storm drainage facilities are installed, inspected, and approved as appropriate; and
 - 2. The sites/lots for which permits are requested are within 500 feet of a paved roadway; and
 - 3. The date of the permit request is between December 1 and March 31.

The number of building permits allowed to be issued in this manner will be no more than 5 per subdivision. If at any time the Director of Public Works determines adequate vehicular access is not being maintained for police and fire equipment, building inspections and permits will be suspended in that subdivision until such deficiencies are remedied to the satisfaction of the Director of Public Works.

(2) The public ways extending access to the new lots shall be improved to a minimum of having the base layer of pavement installed prior to the issuance of a certificate of occupancy. The developer shall, prior to the signing of the final plat by the Secretary of the Commission, submit monies in escrow and/or letter of credit/performance agreement to the governing body in a sum to be determined by the Director of Public Works and the Director of Utilities for any remaining incomplete improvements or facilities.

ARTICLE 8

ADOPTION OF REGULATIONS AND AMENDMENTS

8-101	the objectives and standards set forth in regulations are hereby adopted this _ immediately shall be in full force and efficience. Tennessee Code Annotated, a public he on	these regulations, these subdivision day of, 20, and fect. Pursuant to Section 13-4-303 aring was held on these regulations. Town Hall in Smyrna, Tennessee
	Chairman	Date
	ATTEST:	
	Secretary	 Date

APPENDIX

POST-ADOPTION AMENDMENTS

¹ Amended November 2003. ² Amended May 2007. ³ Ibid.

- ¹² Ibid.
- ¹³ Amended July 2002. ¹⁴ Amended March 2006.
- ¹⁵ Ibid.
- ¹⁶ Amended November 2003.
- ¹⁷ Ibid.
- ¹⁸ Amended May 2005.

⁴ Ibid.

⁵ Ibid. ⁶ Ibid. ⁷ Ibid.

⁸ Ibid.

⁹ Ibid.

¹⁰ Ibid.

¹¹ Ibid.