

Knoxville-Knox County MINIMUM SUBDIVISION REGULATIONS

**Adopted July 8, 1971
As amended through June 14, 2012**

KNOXVILLE-KNOX COUNTY

M P C

**METROPOLITAN
P L A N N I N G
C O M M I S S I O N**

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SECTION 1

PURPOSE, TITLE, AUTHORITY

11 GENERAL PURPOSE

The subdivision regulations are adopted in order to provide for the harmonious development of the City of Knoxville and Knox County and their environs; for the coordination of roads within the subdivided land, with other existing or planned roads, or with the state or regional plan, or with the plans of municipalities in or near the region; for adequate open spaces for traffic, light, air and recreation; for the conservation or production of adequate transportation, water, drainage and sanitary facilities; for the avoidance of population congestion; for the avoidance of such scattered or premature subdivision of land as would involve danger or injury to health, safety or prosperity by reason of the lack of water supply, drainage, transportation or other public services, or would necessitate an excessive expenditure of public funds for the supply of such services; and, to control the manner in which roads shall be graded and improved, and water, sewer and other utility mains, piping, connections or other facilities shall be installed.

12 TITLES

12-10 Title of Regulations. Minimum regulations governing the subdivision of land within the entire territory of Knox County, establishing procedures for the submission and review of subdivision plats, establishing standards for the design and installation of improvements to subdivisions, providing for the administration and enforcement of these regulations, and providing for penalties for their violation.

12-20 Short Title. *The Knoxville-Knox County Minimum Subdivision Regulations.*

13 AUTHORITY

Authority has been conferred by the Tennessee General Assembly by Title 13, Section 13-3-101 through Section 13-3-304 and Section 13-3-401 through Section 13-3-411 of the *Tennessee Code Annotated*, as amended, and other pertinent statutes for the establishment of regulations governing the subdivision of land.

SECTION 2

DEFINITIONS

21 PURPOSE

The purpose of this section is to eliminate ambiguity by providing a full definition of certain words and phrases which are used in these regulations.

22 DEFINITION OF WORDS

For the purposes of these regulations and in order to carry out the provisions and intentions as set forth herein, certain words, terms, and phrases are to be used and interpreted as defined hereinafter. Words used in the present tense include the future tenses; words in the singular number include the plural, and words in the plural number include the singular; the word "person" includes a firm, partnership, or corporation as well as an individual; the word "lot" includes the word "plot" or "parcel"; the word "building" includes the word "structure"; and the terms "shall" and "will" are always mandatory and not directory, and the word "may" is permissive.

The following words, terms, and phrases are hereby defined as follows and shall be interpreted as such throughout these regulations. Terms not herein defined shall have the meanings customarily assigned to them.

Acceptance. Verification by the proper authority that a required improvement has been completed and accepted or that a bond sufficient to insure its construction in accordance with a prior approved design plan has been accepted.

Administrative Agency. An agency of state or local government.

Average Ground Elevation. The elevation of the mean finished grade.

Benchmark. A permanent reference monument (see definition) or suitably identified marker on a surface of a permanent structure which is referenced to mean sea level datum and for which the elevation above mean sea level has been determined to the nearest one-hundredth of a foot.

Block. A surface land area which is separated and distinguished from other surface land areas by visible physical boundaries such as streets, railroads, rivers, or other physical barriers.

Block Number. The official number or letter assigned to a block for identification purposes.

Broken Back Curves. Two (2) curves in the same direction with different origins (center points of the circles) connected by a tangent less than one thousand five hundred (1500) feet in length.

Buildable Area of a Lot. That portion of a lot bounded by the required rear and side yards and the building setback line.

Building. Any enclosed structure intended for shelter, housing, or enclosure of persons, animals, or chattel.

Building Setback Line. A line in the interior of a lot which is generally parallel to, and a specified distance from, the street right-of-way line or lines; which creates a space between such lines in which no building shall be placed.

Certification. The Planning Commission's endorsement that the final plat conforms to all legal requirements necessary for its recording.

City. City of Knoxville, Tennessee.

City Council or Council. City Council of the City of Knoxville, Tennessee.

Community Sewer System. A central sewer system which is owned, operated and maintained by a private corporation or non-profit property owners' association.

County. Knox County, Tennessee.

County Commission or Commissioners. The Knox County Commission and/or Commissioners.

Dedication. The setting aside by the owner and acceptance by the public of land for some public use.

Design Review. The review by the Planning Commission staff and/or other administrative agencies of a subdivision's design and conformance to development regulations, including these subdivision regulations.

Developer. An individual, partnership corporation, or other legal entity or agent thereof which undertakes the activities covered by these regulations. Inasmuch as the subdivision plan drawings are merely a necessary means to the end of assuring satisfactory development, the term "developer" includes "subdivider", "owner" or "builder", even though the persons and their precise interests may vary at different project stages.

Distribution. The transmittal by the Planning Commission staff of copies of plats and engineering documents to those agencies required to review them.

Easement. The right to use another person's property, but only for a limited and specifically named purpose; the owner generally continues to make use of such land since he has given up only certain, and not all, ownership rights.

Easement Area. A strip of land over, under, or through which an easement has been granted.

Engineer. A qualified civil engineer registered and currently licensed to practice engineering in the state of Tennessee.

Engineering. The preparation of plans, specifications, and estimates for, and the contact administration of construction of streets, drainage facilities, utilities and other similar public works installed within a subdivision for public use.

Field Trip. Conference and on-site investigation to determine the scope and types of improvements and the design criteria which apply to each proposed subdivision and to compare the plans with existing conditions.

Floodplain. The relatively flat area or low lands adjoining a floodway or other low area which has been, or may be, subject to be covered by floodwater.

Floodway. The natural channel and the portion of the floodplain along the channel that must be retained solely for the passage of floodwaters to prevent an undue increase in flood heights upstream.

Frontage. All property on one (1) side of a street between two (2) intersecting streets (crossing or terminating) measured along the line of the street; or if the street is dead-ended, then all of the property abutting one (1) side between an intersecting street and the dead-end of the street.

Health Department. Knox County Health Department.

Improvements. Physical changes made to raw land and structures on or under the land surface in order to make the land more usable for man's activities. Typical improvements in these regulations would include but not be limited to grading, street pavement, curbs, gutters, drainage ditches, storm and sanitary sewers, street name signs, and street trees.

Individual Sewage Treatment Facility. A subsurface sewage disposal system as approved by the Knox County Health Department.

KGIS. The Knoxville, Knox County, Knoxville Utilities Board Geographic Information System.

Knox County Engineering Division. A division of the Knox County Department of Engineering and Public Works.

Knoxville Engineering Division. A division of the Department of Operations and Engineering of the City of Knoxville.

Land Remnant. Any portion of a tract of land which cannot be developed after the tract has been subdivided.

Lot. A parcel of land which is or may be occupied by a building and its accessory building or uses customarily incidental thereto, together with such yards or open spaces within the lot lines as may be required by these regulations or zoning ordinance.

Lot, Double Frontage. A lot which extends through a block from street to street or which has two (2) non-intersecting sides abutting on two (2) or more streets.

Lot Area. The total horizontal area included within lot lines.

Lot Frontage. The dimension of a lot or portion of a lot abutting on a street excluding the side dimension of a corner lot.

Lot Number. The official number assigned to a lot for identification purposes.

Lot Width. The width of a lot at the front building setback line measured at right angles to its depth.

Major Road Plan. The official plan adopted by the Metropolitan Planning Commission and the Knoxville Regional Transportation Planning Organization designating classifications, required right-of-way widths, and locations of streets in Knoxville and Knox County.

Permanent Reference Markers. Iron pins three-fourths (3/4) inch in diameter and at least thirty-six (36) inches in length set flush with the pavement at the point of intersection (PI) of the centerline of the right-of-way of two (2) intersecting streets, at the point of intersection (PI) of the center point of a cul-de-sac and the centerline of the street right-of-way, extended, and at such intermediate points as shall be determined by the appropriate city or county agency.

Permanent Reference Monument. Stone or concrete markers not less than thirty-six (36) inches in length and six (6) inches square with an iron pin set flush in the marker and each marker set flush with the finished grade (or other satisfactory monument as determined by the appropriate administrative agency).

Plan, Concept. An overall plan for the development of a tract of land in sufficient detail to evaluate the proposed road and lot layout and general drainage plan, and specifying the proposed improvements.

Plan, Design. A plan for the development of a subdivision, consisting of maps and engineering documentation in sufficient detail to verify that proposed improvements will be built that meet the standards of Knox County or the City of Knoxville.

Planning Commission. The Knoxville-Knox County Metropolitan Planning Commission.

Plat, Final. An official survey instrument to be placed in the public records of Knox County and construction drawings of roads, utilities, site development and public improvements.

Public Hearing. A meeting for the review of a matter where opinions may be presented by the public. These hearings may take place during the regular Planning Commission meetings and are held according to state laws.

Public Sewer System. A central sewer system owned, operated, and maintained by a municipality, county, or utility district.

Public Uses. Public parks, schools, and administrative, cultural, and service buildings, not including public land or buildings devoted solely to storage and maintenance of equipment and material.

Public Water System. A central water system owned, operated, and maintained by a municipality, county, or utility district.

Receipt. The receipt by the Planning Commission staff of all of the material which comprises the proper submittal of a plan or plat for administrative review or for consideration by the Planning Commission.

Recommendation. The Planning Commission staff's formal opinion concerning approval, conditional approval, disapproval, or postponement of consideration of a plan or plat, or the opinion of a responsible reviewing agency concerning an aspect of a plan or plat.

Recreational Facilities. Country clubs, riding stables, golf courses, and other similar recreational areas and facilities including swimming pools.

Register of Deeds. Knox County Register of Deeds.

Reserve Strip. A portion of land set aside to prevent and prohibit access to adjoining property or public thoroughfare.

Review. The Planning Commission staff's and other administrative agencies' study (1) of Concept Plan for conformance to the Subdivision Regulations or (2) of a Design Plan for conformance to the Subdivision Regulations and development standards of agencies having review responsibilities or (3) of a Final Plat for conformance to the approved Design Plan and of platting required by the Subdivision Regulations.

Reviewing Agency. An agency which has responsibility for evaluation and verification of subdivision plans or plats or engineering documents.

Right-of-Way. An area used as a public way, measured from boundary line to boundary line, which may also accommodate public utilities.

Road. For the purpose of these regulations, "road" shall be defined the same as "streets".

Roadway. The portion of the street right-of-way which contains the street pavement, curb, and gutter, and is used primarily as a channel for vehicular movement and secondarily as a drainage channel for stormwater. In these regulations where curbs are required, the pavement is measured from face to face of the curbs; without curbs, it is the measurement of the wearing surface.

Rocking. The preparation of a roadway base.

Sanitary Sewer System. A public or community sewage disposal system of a type approved by the State Department of Public Health.

Secretary. The person designated by the Planning Commission as its secretary.

Septic Tank. See Individual Sewage Treatment Facility.

Setback. The distance required to obtain the minimum front, side, and rear yards.

Sight Distance. The distance visible to the driver of a passenger automobile, measured along the normal path of a roadway, when the view is unobstructed.

Staff. Employees of the Knoxville-Knox County Metropolitan Planning Commission.

Street. The entire width between the boundary lines of every way when any part thereof is open to the use of the public for purposes of vehicular travel.

Street, Classified. A street, either existing or proposed, which is assigned a functional street classification by the *Major Road Plan*.

Street, Half. A street having width less than required by these and other appropriate regulations.

Street, Intersection. Any street which joins another street at an angle, whether or not it crosses the other.

Street Classification. Types of streets as set forth in the *Major Road Plan* for the City of Knoxville and Knox County.

Street Furniture. Any improvements placed within the street right of way, such as utility poles, street signs, etc.

Street Grade. The officially established grade of the street upon which a lot fronts. If there is no officially established grade, the existing grade of the street at the midpoint of the lot shall be taken as the street grade.

Street Line. The right-of-way, or legal line dividing the street right-of-way and abutting property.

Street Sign. The sign designating the official name of the street.

Subdivider. For the purpose of these regulations, “subdivider” shall be defined the same as “developer”.

Subdivision. The division, redivision, or resubdivision, 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, except any division which creates lots or sites which are larger than five (5) acres and not requiring new street or utility construction.

Surveying. Any service of work, the adequate performance of which involves the application of special knowledge of the principles of mathematics, the related

physical and applied sciences, and the relevant requirements of law for adequate evidence to the act of measuring and locating lines, angles, elevations, natural and man-made features in the air, on the surface of the earth, within underground workings, and on the beds of bodies of water for the purpose of determining areas and volumes, for the monumenting of property boundaries, and for the platting and layout of lands and subdivisions thereof, including the topography, drainage, alignment and grades of streets, and for the preparation and perpetuation of maps, record plats, field notes, records and property descriptions that represent these surveys.

Surveyor. A qualified surveyor registered and currently licensed to practice surveying in the State of Tennessee.

Test Holes. Openings dug, bored, or drilled in the ground for conducting soil tests.

Unit. A subsection of a total subdivision developed as a complete segment.

Use. The specific purpose for which land or a building is designed, arranged, intended, or for which it is or may be occupied or maintained. The term “permitted use” or its equivalent shall not be deemed to include any nonconforming use.

Utility. A service to the public, including sanitary and storm sewers, water, electric power, gas, telephone and other communication means, police and fire protection, garbage collection, mail, street lighting, and so forth.

Utility Agency. A municipal department, private for-profit or not-for-profit corporation, utility district or special district, or state, federal, or local agency which provides utility service to the public.

Verification. The written indication by each administrative and utility agency that the Design Plan and its accessory engineering documents conform to the section of these subdivision regulations which apply to that agency’s area of responsibility and to that agency’s requirements, or a written statement of the plan’s deficiencies.

Watercourse. Any natural or artificial stream, river, creek, channel, ditch, canal, conduit, culvert, drain, waterway, gully, ravine, street, roadway, or wash in which water flows in a definite direction or course, either continuously or intermittently, and which has a definite channel, bed or banks, and shall include any area adjacent thereto subject to inundation by reason of overflow or surface water.

Watercourse, Permanent. A watercourse that flows year-round.

Way. A street or alley or other thoroughfare or easement permanently established for passage of persons or vehicles.

Zoning Ordinance. The duly adopted *Zoning Ordinance of Knoxville, Tennessee* or the *Zoning Ordinance of Knox County, Tennessee*.

SECTION 3

ADMINISTRATION

31 PURPOSE

The purpose of this section is to specify the functions to be performed by the various administrative agencies in administering these regulations.

32 PLANNING COMMISSION

The Planning Commission and its staff shall perform the following duties in regard to the administration of these regulations:

32-10 Maintenance of Records. The staff of the Planning Commission shall maintain permanent and current records of these regulations, including amendments thereto.

32-20 Plans and Plats. The Planning Commission, as represented by its staff, shall receive all plans and plats, except Design Plans, for administrative review and distribution.

32-21 Distribution of Plans and Plats. The Planning Commission staff shall distribute copies of all plans and plats, except Design Plans, to appropriate administrative and utility agencies for review as to conformance with the individual agency's requirements and with these regulations.

32-22 Review. The Planning Commission staff shall review all plans and plats for subdivision design and conformance to regulations governing the subdivision of land.

32-23 Field Trips. The Planning Commission staff shall arrange for and conduct all conferences and field trips necessary for proper investigation of plans and plats.

32-24 Recommendations. Based upon findings of the staff's review and the recommendations of other appropriate agencies, the Planning Commission staff shall make recommendations for approval or disapproval, or upon written request by the developer, postponement of consideration of the Concept Plan or Final Plat and place on the appropriate Planning Commission agenda.

32-25 Design Plan Approval. The Planning Commission staff shall require submission of statements certifying design approval from appropriate utilities and reviewing agencies prior to, or at the time of receipt of the final plat for Planning Commission consideration.

32-26 Notification. The Planning Commission shall notify the developer of the time and place of the public hearing on the Concept Plan or Final Plat. Notification shall take place at least five (5) days prior to the public hearing.

32-30 Approval or Disapproval. The Planning Commission shall receive the recommendations of its staff and approve, disapprove, or upon written request by

the developer, postpone consideration of the Concept Plan or Final Plat. In the event that the Planning Commission fails to either approve, postpone with concurrence of applicant, or disapprove a Final Plat within sixty (60) days of its receipt, such plat shall be regarded as approved.

32-40 Certification. Upon approval of the Final Plat, the Planning Commission shall certify that such plat is approved for recording with the Knox County Register of Deeds.

32-41 Distribution of Certified Plat. Upon certification of the Final Plat, certified copies of such plat shall be distributed to appropriate administrative and utility agencies by the Planning Commission staff.

32-50 Records. The Planning Commission staff shall keep a record of all plans and plats, the comments of appropriate governmental agencies and private individuals, and Planning Commission actions pertaining thereto.

32-60 Subdivision Review Responsibility. The following utilities and administrative agencies shall have review responsibilities under these regulations: Knox County Health Department, Knox County Engineering Division, Knoxville Engineering Division and Utility Districts which provide sewer and water. Utilities which provide electricity, gas, telephone, or other communication services shall have no design review responsibility under these regulations, but may aid in the design of proposed subdivisions.

33 COUNTY HEALTH DEPARTMENT

The County Health Department shall perform the following duties in regard to the administration of these regulations:

33-10 Concept Plan. After review of the Concept Plan, the County Health Department shall provide the Planning Commission with a written statement relative to the possible success of the proposal with respect to the following:

33-10.1 Sewage Disposal Facilities. The adequacy of proposed sewage disposal facilities.

33-10.2 Soil Suitability. The soil suitability as indicated by a soil survey certified by a Soil Scientist.

33-10.3 Other Health Factors. Any other factors relating to the health of the community.

33-20 Final Plat. After review of the Final Plat, the County Health Department shall certify approval on the plat or if disapproved, provide the Planning Commission with a written statement of deficiencies.

34 KNOX COUNTY ENGINEERING DIVISION

The Knox County Engineering Division shall perform the following duties in regard to the administration of these regulations for subdivisions within the unincorporated area of Knox County.

- 34-10 Concept Plan.** After review of the Concept Plan, the Knox County Engineering Division shall provide the Planning Commission with a written statement relative to the general acceptability of proposed roads, drainage systems and related improvements.
- 34-20 Design Plan.** After review of the Design Plan, the Knox County Engineering Division shall provide the developer or his design engineer with a written statement certifying approval of design of all proposed roads, drainage systems, and related improvements or a listing of deficiencies.
- 34-30 Sufficiency of Bonds.** The sufficiency of bonds to guarantee completion of roads, drainage systems and related improvements shall be determined by the Knox County Engineering Division.
- 34-40 Final Plat.** After review of the Final Plat, the Knox County Engineering Division shall certify acceptance on the plat of roads, drainage systems, monuments, and related improvements, or certify that the bond has been accepted to guarantee completion.

35 KNOXVILLE ENGINEERING DIVISION

The Knoxville Engineering Division shall perform the following duties in regard to the administration of these regulations for subdivisions within the corporate limits of the City of Knoxville:

- 35-10 Concept Plan.** After review of the Concept Plan, the Knoxville Engineering Division shall provide the Planning Commission with a written statement relative to the general acceptability of proposed roads, drainage systems and related improvements.
- 35-20 Design Plan.** After review of the Design Plan, the Knoxville Engineering Division shall provide the developer or his design engineer with a written statement certifying approval of design of all proposed roads, drainage systems and related improvements or a listing of deficiencies.
- 35-30 Sufficiency of Bonds.** The sufficiency of bonds to guarantee completion of roads, drainage systems and related improvements shall be determined by the Knoxville Engineering Division.
- 35-40 Final Plat.** After review of the Final Plat, the Knoxville Engineering Division shall certify acceptance on the plat of roads, drainage systems and related improvements, or that bond has been accepted to guarantee completion.

36 APPEALS

An appeal of any action or decision rendered pursuant to these regulations shall be to any Court of competent jurisdiction.

SECTION 4

PROCEDURES AND SPECIFICATIONS FOR SUBMISSION OF PLANS AND PLATS

41 GENERAL PURPOSE

The purpose of this section is to outline the procedure which shall be followed by the developer in submitting plans and plats to the Planning Commission and to specify the information required to be included on or to accompany plans and plats of proposed subdivisions. Two (2) plans and one (1) plat are required to be submitted, the Concept Plan, Design Plan and the Final Plat. One objective in requiring three submissions is to assist the developer in the sound and economical development of his property through the examination of the suitability of the property for subdivision development. A second objective is that administrative and utility agencies may aid in the design of proposed subdivisions. The Concept Plan and the Final Plat shall receive formal Planning Commission approval. Procedures and specifications are also outlined for review of minor subdivisions and administrative plat reviews.

42 CONCEPT PLAN

42-10 Purpose. The Concept Plan is the first official plan required by these regulations. The purpose of this plan is to provide the Planning Commission and the Planning Commission staff with sufficient information to determine the practicality, suitability, and conformance with regulations of the proposed concept.

42-20 When Concept Plans are Required. A Concept Plan shall be required for any subdivision that will divide land into six (6) or more lots, or include the construction and dedication of a public street. A concept plan may be required by staff pursuant to Section 45-31.2 for subdivisions with joint permanent easements, or due to drainage, grading, topographic, environmental, access, or other such problems.

42-30 Submission of Concept Plan. The applicant shall submit the Concept Plan to the Planning Commission for consideration. Sufficient copies of the plan and related data, as required in Section 42 of these regulations, shall be submitted to Planning Commission staff for distribution to each utility and administrative agency having subdivision review responsibility.

42-40 Public Hearing. The Planning Commission shall consider the Concept Plan in public hearing at its first regular meeting consistent with closing date for filing proposals as prescribed in Article 1, Section 3, of the *Knoxville-Knox County Metropolitan Planning Commission Administrative Rules and Procedures*. The developer will be notified of such hearing in accordance with Section 32-26 of these regulations and he or his representative should be present.

42-50 Planning Commission Action. Following the public hearing, the Planning Commission will consider all recommendations and approve, approve subject to conditions, disapprove, or upon request of the developer, either in writing or at the hearing, postpone action or permit withdrawal of the Concept Plan.

42-50.1 Approval of the Concept Plan by the Planning Commission is conditional on certification of engineering documentation that the proposed development meets the development standards of Knox County or the City of Knoxville, and of the authorities having development review responsibilities, and all applicable regulations in effect at the time of certification of Design Plan.

42-70 Plan. The Concept Plan shall consist of a scale drawing of the proposed concept of design, showing general roadway layout, tentative lot layout, and a general drainage plan. The drawing shall generally be contained on one sheet at a scale of not more than one hundred (100) feet to the inch. For large plans which cannot meet these specifications, the Planning Commission staff may allow the submission of drawings on multiple pages and/or a scale of up to two hundred (200) feet to the inch. The following information shall be shown on the plan:

42-71 Location Map. A sketch showing the general location of the subdivision in relation to the surrounding area shall be placed on the sheet, generally in the upper right or left corner, or other suitable place. The location sketch shall be drawn large enough to show the proposed subdivision's relationship to existing community facilities such as major traffic arteries, schools, and natural features, such as rivers and streams.

42-72 Topography with contours at two foot intervals. In areas where two foot contours are not available from KGIS, the Planning Commission staff may allow the submission of four foot contours if they determine that closer intervals are not necessary for review.

42-73 Boundary, existing and proposed roads. Boundary of tract, name and location of all existing and proposed roads within and adjacent to tract, and all intersecting roads across adjacent roads from tract.

42-74 Physical characteristics of the site. Physical characteristics of the site, such as wetlands, sinkholes and depressions, major rock outcroppings, woods, natural waterways and other prominent physical features.

42-75 Existing structures, existing utilities.

42-76 Title Block. The title block of the Concept Plan shall contain the following information.

42-76.1 Subdivision Name. The proposed name of the subdivision shall not duplicate nor closely approximate (phonetically or in spelling) the name of any other subdivision in Knox County or the City of Knoxville and shall be preceded by the words, "Concept Plan of _____."

42-76.2 Person Identification. The name, mailing address and telephone number of the property owner, the developer, the engineer, and any other persons directly involved in the transaction shall be indicated.

42-76.3 **Date and Scale.** The plan shall show the date of design, the north arrow pointing towards the top of the sheet and the scale which shall be at not more than one hundred (100) feet to the inch.

42-76.4 **Property Identification.** The property being subdivided shall be identified by the county tax collectors identification number or city ward, block and parcel or lot number.

42-77 Number of lots proposed and total acreage of tract.

42-78 Certification. The Concept Plan and all accompanying drawings, documents and statements shall be certified as prescribed in Section 44-112.1 and 44-112.2 of these regulations.

42-79 Public or Private Roadways. The Concept Plan shall designate whether the roadways shown to be developed are to be public roadways or joint permanent easements.

42-80 Digital Media. Submission of the Concept Plan in digital format compatible with the geographic information systems of KGIS and other public review agencies is optional.

42-90 Accompanying Drawings, Documents, Statements. The following information shall accompany the Concept Plan:

42-91 General Drainage Plan. Showing existing drainageways and probable location of major drainage structures including detention basins.

42-92 Road Profiles. At a horizontal scale equal to the horizontal scale of the land subdivision plan and a vertical scale of one-tenth (1/10) of the horizontal scale.

42-93 List of required and proposed improvements.

42-94 Statement(s) or Letter(s) indicating the availability of public utilities.

42-100 Staking Roads. The point of intersection of all perimeter roads with existing roads or with the boundary line of the tract must be staked prior to submission of the Concept Plan and the subdivision designer must meet in the field with reviewing agencies at their convenience; or the centerline of all roads must be staked prior to submission of the Concept Plan.

43 DESIGN PLAN

43-10 Purpose. The design plan is the second required submission. The purpose of this plan is to provide engineering documentation in sufficient detail to insure that the subdivision, including all improvements, is in conformance with the approved Concept Plan and Subdivision Regulations and meets the standards of Knox County or the City of Knoxville and of the utilities and administrative agencies having development review responsibilities.

- 43-20 Submission of Design Plan.** The applicant shall submit the required Design Plan and related data to the appropriate utility and administrative agencies having development review responsibility.
- 43-30 Approval of Design Plan by Reviewing Agencies.** Approval of the Design Plan by the appropriate reviewing agency assures consideration of a final plat of the subdivision which conforms with the approved Design Plan. Such a verification represents a commitment by the verifying agency to recommend the acceptance of improvements built according to the approved Design Plan and its accompanying engineering documents so long as those are in minimum compliance with the requirements of these regulations. The Design Plan shall not be approved until it is determined that the Plan is in compliance with the approved Concept Plan including all conditions of the Concept Plan approval that must be met prior to Design Plan approval. Approval of Design Plan by the Knox County Engineering Division shall not require or be interpreted to mean that a roadway shown on such plan will be recommended or accepted as a public roadway.
- 43-60 Plan.** The Design Plan shall consist of all detailed engineering design and construction drawings, calculations, and related documents necessary to construct the proposed subdivision in conformance with the approved Concept Plan, the standards of Knox County or the City of Knoxville and the standards set forth in these regulations. If the Design Plan is not in substantial conformance with the Concept Plan, or all standards and design criteria cannot be met, a new or revised Concept Plan must be submitted for Planning Commission approval. The following information shall be shown on the plan:
- 43-61 Plan Information.** Location map, number of lots and total acreage, subdivision name and unit number, person identification, date and scale, property identification, as prescribed in Section 42 of these regulations.
- 43-62 Dimensional Information.** Final dimensions and bearings for all lot lines, tract boundary, roads, and required or proposed easements and lot numbers, and proposed building setback with distance from street right-of-way if other than the minimum required by zoning.
- 43-63 Permanent reference markers, monuments and benchmarks.**
- 43-63.1 **Permanent reference markers and/or monuments.** Permanent reference markers and/or monuments as defined in Section 2 of these regulations shall be installed in all subdivisions of five (5) lots or more. The number of markers and/or monuments and their locations shall be mutually agreed upon by the developer or his representative and the responsible administrative agency. In no case shall fewer than (2) markers and/or monuments be provided and no more than five (5) may be required in a unit of a subdivision which consists of fifty (50) acres or less.
- 43-63.2 **Benchmarks.** All subdivisions of five (5) or more lots must have a benchmark installed or be referenced to an existing benchmark as defined in Section 2. Such structures as poured concrete headwalls or sewer

inverts may be deemed acceptable for designation as benchmarks at the discretion of the responsible administrative agency.

- 43-64 Drainage and Utilities.** Location, size and capacity of all drainage facilities including ditches, culverts, pipes, catch basins, detention basins, including final location, location of utilities, and related easements.
- 43-65 Non-Residential Designations.** The name, acreage, and use of any sites proposed for public use such as parks, playgrounds, etc., and the name, acreage, and any other uses (except houses) such as multi-dwelling structures, shopping centers, churches, etc., shall be indicated.
- 43-66 Other Conditions.** Other conditions on the tract to be shown on the Design Plan shall include the following information:
- 43-66.1 Watercourses, wetlands, sinkholes and depressions, major rock outcroppings, woodlots, railroads, bridges, or other structures.
- 43-67 Public or Private Roadways.** The Design Plan shall designate and identify each roadway as to whether it shall be a public roadway or joint permanent easement.
- 43-70 Accompanying Drawings, Documents, Calculations.** The following detailed information shall be submitted to the reviewing agencies and must be approved by the appropriate agency as an integral part of the Design Plan.
- 43-71 Horizontal and vertical roadway design data.** Typical cross sections of each proposed type of street at a scale of ten (10) feet or less to the inch showing the width and depth of pavement, the location and width of rights-of-way and sidewalks, the location of sewer, water, and drainage facilities, must be included.
- 43-72 Drainage Plan.** Calculations of structure sizes and storage requirements.
- 43-73 Detention basin details and available storage.**
- 43-74 Horizontal and vertical design data.** Horizontal and vertical design data including typical cross sections for open drainageways and ditches and proposed treatment of disturbed drainageways to avoid erosion and sedimentation (seeding, sodding, riprap, paving, other).
- 43-75 Utility Plans.** The utility plans shall contain the following information concerning existing and proposed utilities including sanitary sewers, water lines, storm sewers, and existing gas, telephone, and electrical lines.
- 43-75.1 The location, sizes, and capacities, where appropriate, of all water mains, manholes, pumping stations, standpipes, reservoirs, valves, fire hydrants, and similar facilities, and the locations and dimensions of specific easement areas related thereto.
- 43-75.2 A plan and profile including invert elevation of all sanitary sewers, manholes, lift stations, treatment plants, and similar facilities, and the locations and dimensions of specific easement areas related thereto. The

vertical scale of profiles shall be one tenth (1/10) of the horizontal scale, as required by the Tennessee Department of Health.

44 FINAL PLAT

44-10 Purpose. All subdivision plats shall receive their second official consideration by the Planning Commission as Final Plats.

44-20 Submission of Final Plat. After the Design Plan has been approved by the appropriate utilities and reviewing agencies, the applicant may submit his final plat for Planning Commission consideration. For all final plats, including minor subdivisions identified in Section 45 below, a total of four (4) paper copies of the plat shall be submitted for review.

44-21 Acceptance of Final Plat. No Final Plat will be accepted by the Planning Commission staff until and unless a properly certified "Certification of Approval of Design Plans" form has been submitted.

44-22 Incomplete Final Plats. Incomplete final plats must be completed and paper copies containing all relevant corrections, certifications, verifications, and approvals must be submitted not less than 9 days prior to the date of the scheduled public hearing or such plat will not be approved by the Planning Commission. Any plat remaining incomplete after this deadline may be postponed to a subsequent meeting or withdrawn upon request in writing. The Planning Commission may waive the nine (9) day deadline with just cause presented to the Commission at a scheduled meeting.

44-30 Time Lapse. Unless a time extension has been requested by the developer and granted by the commission, the Final Plat of the first unit shall be submitted within twenty-four (24) months of the approval date of the Concept Plan; otherwise the plat cannot receive Final Plat consideration, but shall be considered as, and resubmitted as, a new Concept Plan. Final Plat approval of each unit of the subdivision will extend the valid period of the Concept Plan twenty-four (24) months. However, no Concept Plan shall be in effect after five (5) years unless a time extension of up to five years from the last unit is requested by the developer and granted by the Planning Commission.

44-40 Public Hearing. The Planning Commission shall consider the Final Plat in public hearing at its first regular meeting consistent with the closing date for filing proposals as prescribed in Article 1, Section 3, of the *Knoxville-Knox County Metropolitan Planning Commission Administrative Rules and Procedures*. The developer will be notified of such hearing in accordance with Section 32-26 of these regulations and he or his representative should be present.

44-50 Planning Commission Action. Following the public hearing, the Planning Commission will review all recommendations and information presented at the hearing, and consider approval of the Final Plat.

44-60 Reserved

44-70 Certification for Recording. Within twelve (12) months from the date of approval by the Planning Commission, the Final Plat shall be submitted to Planning Commission staff for final certification and recorded in the office of the Knox County Register of Deeds; otherwise, the plat cannot be certified, but shall be resubmitted for consideration by the Planning Commission. The following copies with all appropriate certifications affixed shall be submitted:

44-70.1 For property within the City of Knoxville. One paper copy each for the Knox County Register of Deeds, Planning Commission's Addressing Department, Knoxville Department of Engineering, Knox County Property Assessor and the applicant (Total of five (5) copies).

44-70.2 For property within Knox County. One paper copy each for the Knox County Register of Deeds, Planning Commission's Addressing Department, Knox County Property Assessor and the applicant (Total of four (4) copies).

44-80 Plat. The Final Plat is the official survey instrument to be recorded with the Knox County Register of Deeds. It provides all surveying data necessary for the accurate and legal transfer of property. The record plat, together with statements from the appropriate agencies certifying approval of the Design Plan and its related documents, comprises the Final Plat submission package. The Final Plat shall conform to the Design Plan and shall be prepared in the following manner:

44-81 Reserved

44-82 Scale. The Final Plat shall be drawn to a scale of one hundred (100) feet or less to the inch. Under special circumstances, the plat may be drawn at a larger scale with the approval of the Secretary of the Planning Commission or his or her designee, and so long as the information required to be placed on the plat is legible.

44-83 Size and Border. The Final Plat shall be drawn on a sheet eighteen (18) inches by twenty-four (24) inches. In order to reduce the number of pages in a multi-sheet final plat, the plat may be drawn on a sheet twenty-four (24) inches by thirty-six (36) inches, subject to approval by the Secretary of the Planning Commission, or his or her designee. The final plat shall include a border of one (1) inch on the left-hand edge of the sheet. The border on the remaining three sides shall be one half (1/2) inch. All information placed on the plat shall be at a scale that is legible.

44-84 North Point. The Final Plat shall be so oriented that the north point will be directed as nearly as possible toward the top of the page with the two (2) inch binding edge on the left.

44-85 Page Numbering. When more than one sheet is used for any Final Plat, each sheet shall be numbered consecutively and shall contain a notation indicating the total number of sheets in the plat. In addition, an index sheet of the same dimensions shall be required showing the entire subdivision, the sheet numbers, and outlines for each separate sheet of the Final Plat.

44-86 Reserved

44-87 Reserved

44-88 Survey Accuracy. All subdivision plats shall comply with the standards of practice of the current edition of *Tennessee Land Surveyors Laws and Regulations*, and shall be Category I surveys as defined by those regulations.

44-89 Reserved

44-90 Mapping and Engineering Information. The lines and the width along the property lines for all existing or recorded streets intersecting or paralleling the boundaries of the tract or intersecting roads adjacent to or paralleling the boundaries of the tract.

44-91 Street Lines on Adjacent Land. Show the exact location with dashed lines and the width along the property lines for all existing or recorded streets intersecting or paralleling the boundaries of the tract or intersecting roads adjacent to or paralleling the boundaries of the tract.

44-92 Monument References and Survey Control Requirements.

44-92.1 **Monument References.** Show the accurate location of all permanent reference monuments (Section 43-63) and show the bearings and distances to the nearest established street boundaries, established survey lines, or other official monuments.

44-92.2 **Survey Control System Requirements.** All subdivisions within the City of five (5) or more lots and all resubdivisions within the City which combine or alter five (5) or more lots that have a property line or iron pin located within two thousand (2000) feet of an approved control point in the city survey control system shall be tied to the system. All other subdivisions within the city that have a property line or iron pin located within two hundred (200) feet of an approved control point in the city survey control system shall be tied to the system.

Coordinates of the approved control point shall be shown on the plat and all bearings shown on the plat shall be oriented to the survey control system. The tie line shall show the bearing and distance between the approved control point and the subdivision.

44-93 Owners of Adjacent Land. For adjacent land which is platted, show the boundaries with dashed lines and the recorded name of the subdivision. For adjacent land which is unplatted, show the boundaries with dashed lines and the name of the owners of record.

44-94 Boundary Lines of Tract. In a line style and weight which will distinguish the developer's property from all adjacent property show the tract boundary lines with lengths of courses to hundredths of a foot and bearings to the nearest minute, or better. These boundaries shall be determined by an accurate survey in the field. A boundary closure sheet, utilizing the bearings and distances shown on the plat, is required and shall be submitted when the Final Plat application or Administrative Plat is filed with the Planning Commission.

44-95 Street, Easement, and Lot Lines on Tract. For street rights-of-way, show the names, bearings, angles of intersection, and widths including the widths along the line of any obliquely intersecting street. For all arcs, show the arc lengths, radii, points of curvature and tangency, and their chord bearings and lengths. For all easements or other rights-of-way, show the location, width, and actual name and purpose (gas line easements, etc.). For all lot lines, show horizontal dimensions to hundredths of a foot and their bearings to the nearest one-half minute of horizontal arc unless they lie normal to street boundaries. The Final Plat shall designate and identify each proposed street and road as to whether it shall be a public roadway or joint permanent easement.

44-96 Easements, Dedications and Reservations.

44-96.1 Customary and Special Easements. The Final Plat shall show customary and special easements as required in Section 69 of these regulations.

44-96.2 Reservations and Dedications on Tract. Show the accurate outline of all property which is either offered for dedication to public use or which is reserved by covenant in the deeds for the common use of the property owners in the subdivision with the purpose also plainly printed thereon.

44-97 Site Physical Features. The Final Plat shall clearly indicate the location of lakes, streams, and floodway zones or such other physical features as may be required to be shown by the Planning Commission or other appropriate administrative agency.

44-98 Location Map. A sketch showing the general location of the subdivision in relation to the surrounding area shall be placed on the sheet, generally in the upper right or upper left corner. The location sketch shall be drawn to a scale large enough to show the proposed subdivision's relationship to existing community facilities, such as major traffic arteries, schools, and natural features, such as rivers and streams.

44-99 Lot Numbers, Setback Lines, and Restrictions on Tract. Show the lots numbered in numerical order and blocks lettered in alphabetical order; if use of blocks is not desired, number all lots in the entire subdivision in numerical order; show the front yard setback building lines with depth only when they are greater than the building setback required by the Zoning Ordinance; and if any private restrictions exist, show boundaries of each type of use restriction and any other restrictions.

44-100 Title Block. The title block for the Final Plat drawing shall contain the following information:

44-101 Subdivision Name. The name of the subdivision and, where the plat at hand is only part of a larger subdivision bearing the same name, the unit number shall be indicated. Such subdivision name shall not duplicate or closely approximate any other subdivision name in the city or county. A subdivision divided by an expressway, major or minor arterial street, or major or minor collector street must have a different name for the subdivision located on each side of said street. Each unit of a subdivision with the same name must be connected by interior streets.

The name of the subdivision shall be preceded by the words "Final Plat of _____."

44-102 Property Identification. The property being subdivided shall be identified by the Knox County Property Assessor's identification number and city ward, block, and lot number.

44-103 Person Identification. The name, mailing address and telephone number of the property owner, the developer, the engineer, and any other persons directly involved in the transaction shall be indicated.

44-104 Legend Information. The graphic scale, written scale, north point, date of preparation, acreage, number of lots and any other pertinent legend information should be indicated.

44-110 Certifications. The following appropriate certifications with required signatures shall be affixed to all plans and Final Plats:

44-111 Ownership. The certification of ownership and general dedication shall be as follows:

Certificate of Ownership and General Dedication.

(I, We) _____, the undersigned owner(s) of the property shown herein, hereby adopt this as (my, our) plan of subdivision and dedicate the streets as shown to the public use forever and hereby certify that (I am, we are) the owner(s) in fee simple of the property, and as property owner(s) have an unrestricted right to dedicate right-of-way and/or grant easement as shown on this plat

Signature(s) _____

In the City of Knoxville, all final plats shall include the following notary certification stamp that relates to and shall be located under the owner(s) certification stamp:

State of _____, County of _____

On this _____ day of _____, 20__

Before me personally appeared _____ to me known to be the person described in, and who executed the foregoing instrument, and acknowledged that he executed the same as his free act and deed.

Witness my hand and notarial seal, this the day and year above.

Written. _____ Notary

My Commission expires _____ "Seal"

44-112 Engineering or Surveying Certification. The certification of plans and plats shall be one (1) or more of the following:

44-112.1 **Certification of Concept Plan.**

I hereby certify that I am a registered land surveyor, licensed to practice surveying under the laws of the State of Tennessee. I further certify that the plan and accompanying drawings, documents and statements conform to all applicable provisions of the *Knoxville-Knox County Subdivision Regulations* except as has been itemized and described in a report filed with the Metropolitan Planning Commission.

Registered Land Surveyor _____
Tennessee Certificate No. _____

44-112.2 Certification of Concept Plan.

I hereby certify that I am a registered engineer, licensed to practice engineering under the laws of the State of Tennessee. I further certify that the plan and accompanying drawings, documents and statements conform to all applicable provisions of the *Knoxville-Knox County Subdivision Regulations* except as has been itemized and described in a report filed with the Metropolitan Planning Commission.

Registered Engineer _____
Tennessee Certificate No. _____

44-112.3 Certification of Final Plat – Construction Complete.

I hereby certify that I am a registered land surveyor licensed to practice surveying under the laws of the State of Tennessee. I further certify that this plan and accompanying drawings, documents, and statements conform to all applicable provisions of the *Knoxville/Knox County Subdivision Regulations* except as has been itemized, described and justified in a report filed with the Metropolitan Planning Commission, or for variances for which application has been filed. The indicated monuments were in place on the _____ day of _____, 20____.

Registered Land Surveyor _____
Tennessee Certificate No. _____

44-112.4 Certification of Final Plat – Construction Incomplete.

I hereby certify that I am a registered land surveyor licensed to practice surveying under the laws of the State of Tennessee. I further certify that this plan and accompanying drawings, documents, and statements conform to all applicable provisions of the *Knoxville-Knox County Subdivision Regulations* except as has been itemized, described and justified in a report filed with the Metropolitan Planning Commission, or for variances for which application has been filed. Bond has been posted to guarantee installation of the indicated monuments and benchmark upon completion of the subdivision.

Registered Land Surveyor _____
Tennessee Certificate No. _____

44-112.5 Certification of Category and Accuracy of Survey.

I hereby certify that this is a category_____survey and the ratio of precision of the unadjusted survey is not less than 1:_____

Registered Land Surveyor_____

Tenn. Reg. No._____

44-113 Sanitary Sewerage. The certification for sanitary sewerage shall be one of the following forms:

44-113.1 In unincorporated areas of Knox County where sanitary sewers are not available.

This is to certify that this subdivision is generally suitable for subsurface sewage disposal systems; and this is to notify that all lots are subject to Sections 68-13-401 thru 68-13-413 of the *Tennessee Code, Annotated*, and the regulations promulgated thereto.

Date_____

Knox County Health Department_____

44-113.2 In the City of Knoxville and Sewered Areas of Knox County.

This is to certify that the subdivision shown hereon is approved subject to the installation of sanitary sewers and treatment facilities, and that such installation shall be in accordance with state and local regulations.

Date_____

Knox County Health Department_____

44-114 Zoning.

Zoning district(s) in which the land being subdivided is located shall be indicated as shown on the zoning map by the Planning Commission as follows:

Zoning Shown on Official Map_____

Date_____

By_____

44-115 Appropriate city or county agency shall certify acceptability of improvements by one of the following forms:

44-115.1 Inspection of Completed Streets and Related Improvements:

I, the undersigned, hereby certify this subdivision has been inspected and all streets and related improvements have been completed in a manner that meets all city standards and specifications and have been officially accepted as built by the appropriate official(s).

Signed:_____ Date:_____

Dept:_____ Title:_____

44-115.2 Inspection of Completed Drainage Systems.

I, the undersigned, hereby certify this subdivision has been inspected and drainage systems have been completed in a manner that meets all city and

county standards and specifications (whichever is appropriate) and are fully stabilized and have been officially accepted as built by the appropriate official(s).

Signed: _____

Date: _____

Dept: _____

Title: _____

44-115.3 Guarantee of Completion of Streets and Related Improvements.

I, the undersigned, hereby certify bond or other security has been posted with the appropriate agency to insure completion of all streets and related improvements including indicated permanent reference monuments, benchmarks and iron pins in this subdivision in accordance with required standards and specifications with a period not to exceed one year from date of approval of the Final Plat.

Signed: _____

Date: _____

Dept: _____

Title: _____

44-115.4 Guarantee of Completion of Drainage Systems.

I, the undersigned, hereby certify bond or other security has been posted with the appropriate agency to insure completion and stabilization of all drainage systems as shown on drainage plans which were approved the _____ day of _____, 20____, within a period not to exceed one year from date of approval.

Signed: _____

Date: _____

Dept: _____

Title: _____

44-115.5 Inspection of Completed Streets and Related Improvements.

I, the undersigned, hereby certify this subdivision has been inspected and all streets and related improvements have been completed in a manner that meets all county standards and specifications.

Signed: _____

Date: _____

Dept: _____

Title: _____

44-115.6 Acceptance of Public Roads by Knox County Commission

I, the undersigned, hereby certify that the following roadways as shown on this plat have been accepted as public roads by the Knox County Commission on the _____ day of _____, 20_____.

Signed: _____

Date: _____

Dept: _____
Title: _____

44-115.7 City – Release of Easements.

Except as noted or shown on this plat, the following parties hereby consent to the release of all rights that may have accrued for their use and benefit in the utility and drainage easements along the original lot lines eliminated by this map, on the condition that new utility and drainage easements are provided along the new property lines.

City of Knoxville Engineering Division

Signed: _____

Date: _____

Knoxville Utilities Board (Water & Wastewater)

Signed: _____

Date: _____

Knoxville Utilities Board (Gas)

Signed: _____

Date: _____

Knoxville Utilities Board (Electric)

Signed: _____

Date: _____

BellSouth

Signed: _____

Date: _____

Cable Television

Signed: _____

Date: _____

44-115.8 County – Release of Easements.

Except as noted or shown on this plat, the following parties hereby consent to the release of all rights that may have accrued for their use and benefit in the utility and drainage easements along the original lot lines eliminated by this map, on the condition that new utility and drainage easements are provided along the new property lines.

Knox County Engineering Division

Signed: _____

Date: _____

Water:

Signed: _____

Date: _____

Power:

Signed: _____

Date: _____

Sewer:

Signed: _____

Date: _____

Gas

Signed: _____

Date: _____

Telephone:

Signed _____

Date: _____

Cable TV:
Date:_____

Signed:_____

44-115.9 Addressing Department Certification

I, the undersigned, hereby certify that the subdivision name and all street names conform to the Knoxville/Knox County Street Naming and Addressing Ordinance, the Administrative Rules of the Planning Commission, and these regulations.

Signed:_____

Date:_____

44-115.10 Certification by the Knoxville Engineering Division. All final plats within the City of Knoxville shall be certified by the Knoxville Engineering Division prior to final certification by the Planning Commission and shall be included on the plat as follows:

City of Knoxville Engineering Division

The Knoxville Engineering Division hereby approves this plat on this the _____ day of _____, 20____

Engineering Director

44-116 Approval for Recording – Final Plat. Upon approval and certification of all elements of the Final Plat, the Planning Commission shall certify the plat for recording as follows:

Certification of Approval for Recording – Final Plat

This is to certify that the subdivision plat shown hereon has been found to comply with the Subdivision Regulations of Knoxville and Knox County and with existing official plans, with the exception of any variances and stipulations noted on this plat and in the minutes of the Knoxville-Knox County Metropolitan Planning Commission, on this the____ day of_____, 20____, and that the record plat is hereby approved for recording in the office of the Knox County Register of Deeds.

Signed:_____

Date:_____

44-117 Approval for Recording –Administrative Plat. Upon review by the Planning Commission staff and certification to the secretary of the commission that the subdivision plat complies with all requirements of these regulations, approval and certification for recording may be endorsed on the plat by the secretary as follows:

Certificate of Approval for Recording – Administrative Plat

This is to certify that the subdivision plat shown has been found to comply with the Subdivision Regulations of Knoxville and Knox County and with existing official plans, and the record plat is hereby approved for recording in the office of the Knox County Register of Deeds.

Signed:_____

Date: _____

44-118 Taxes and Assessments. Certification that taxes and assessments have been paid shall be as follows:

This is to certify that all property taxes and assessments due on this property have been paid.

City Tax Clerk: Signed: _____ Date: _____

Knox County Trustee: Signed: _____ Date: _____

45 MINOR SUBDIVISIONS

45-10 Purpose. The purpose of this section is to establish special requirements for minor subdivision plats in order that they may be prepared and processed in much less time that is required for major subdivision plats.

45-20 Qualifications for Minor Subdivision. Any subdivision of land resulting in less than six (6) lots that does not meet the requirements for an administrative plat review or concept plan review shall be processed as a minor subdivision. If a lot has been previously subdivided within the last ten (10) years either by a deed, a one lot subdivision, or as an administrative plat, with the subdivision resulting in an additional lot or lots, any further subdivision of any of the resulting lots into additional lots will require review as a minor subdivision, or if applicable, a concept plan. Any subdivision of land that creates additional lots that will be served by an existing joint permanent easement or extend the joint permanent easement, shall be reviewed as a minor subdivision unless the staff requires a concept plan review pursuant to Section 45-31.2

45-30 Minor Subdivision Procedures. Minor subdivision procedures may vary depending on proposed design, topography, drainage or other factors which may be peculiar to the particular site or area involved. These procedures are as follows:

45-31 Submission of Application. A formal application for final plat approval, which may include information such as is required for a Concept Plan, as provided for in Section 42 of these regulations, shall be submitted to the Planning Commission staff.

45-31.1 Waiver of Benchmark Requirement. At the discretion of the responsible reviewing agency, the requirement that a benchmark be installed (Section 43-63.2) may be waived in a minor subdivision.

45-31.2 Concept Plan Required by Staff. If a proposed minor subdivision includes only a part of a larger tract, includes a joint permanent easement, or if drainage, topographic, environmental, access, or other such problem exists, the staff may require the submission of a Concept Plan for the proposed subdivision, or for the entire tract.

45-32 Review of Application. The Planning Commission staff shall conduct both office and field reviews of the subdivision and advise the applicant of their findings.

45-32.1 No Concept Plan, Amendment, or Additional Information is required. If no Concept Plan, amendment, or additional information is required, the plat will be placed on the appropriate Planning Commission agenda, consistent with filing date of application.

45-32.2 Concept Plan, Amendment, or Additional Information Required. If Concept Plan, amendment, or additional information is required, the plat will not be placed on the Planning Commission agenda for Final Plat approval. The applicant will be advised as to additional requirements. Upon receipt and review of the required submission, the applicant's plat will be placed on the appropriate Planning Commission agenda, consistent with date of submission of the additional data.

46 ADMINISTRATIVE PLAT REVIEWS

46-10 Purpose. The purpose of this section is to establish special procedures for administrative plat review with minimum delay in processing such subdivisions for recording.

46-20 Qualifications for Administrative Plat Review. The subdivision shall be classified as an administrative plat when the plat divides the tract into no more than two (2) lots thereby creating only one (1) new lot, where the plat combines existing lots into no more than two lots, where an adjustment is made to the lot line(s) between two existing recorded lots, where a plat is required for recording an easement or new information and no subdivision of land is involved, or, where the plat meets the requirements for an exempt or corrected plat.

46-30 Administrative Plat Review Procedures. Administrative plat review procedures may vary depending on conditions involved. The procedures are as follows:

46-31 When Variance Is Not Requested. When no variance is requested no formal application is required

46-31.1 Review and Certification by Staff – Endorsement of Approval by Secretary. The staff of the Planning Commission shall review the subdivision plat with ten (10) working days and, a) certify to the secretary of the commission that such plat complies with all requirements of these regulations, or b) advise the surveyor of the plat's deficiencies.

46-31.2 Approval and Certification for Recording. Upon correction of all deficiencies, if any, and a determination by the Planning Commission staff that all requirements have been met, approval and certification for recording may be endorsed on the plat by the Secretary of the Planning Commission.

46-32 When Variance Is Requested. When any variance to these regulations has been requested, a formal application for final plat approval shall be required.

46-32.1 Review and Recommendation to Planning Commission and Certification. Such subdivision plats shall be placed for consideration on the next appropriate Planning Commission agenda consistent with filing date of

application. Final Plat procedure will be followed in reviewing and making recommendations to the Planning Commission and, if approved, certified for recording.

46-40 Exempt Plats. A plat shall be considered as an exempt plat if the division of property meets all of the following criteria:

46-40.1 All lots being created by the division of property are five (5) acres or greater in area.

46-40.2 All lots shall have at a minimum, twenty-five (25) feet of frontage on a public street or access to a public street by an exclusive permanent easement pursuant to the requirements of Section 64-24. Such public street does not qualify if the street was constructed and dedicated for the purpose of subdividing lots for residential or nonresidential use within the last ten (10) years.

46-40.3 No new road construction is required to serve the subdivision. If the construction of a joint permanent easement is required, the subdivision would not qualify.

46-40.4 No new utility construction is required other than individual service lines to a lot.

46-40.5 The proposed lots are not a result of the combination of lots smaller than five acres.

46-41 While an exempt plat is not subject to all the requirements of these regulations, an administrative plat review is required to determine if the plat complies with the above referenced criteria, and if the plat meets a mathematical property boundary closure and computed area requirements.

46-42 An exempt plat shall include the surveyor's seal (signed and dated) and the following certification stamps: survey accuracy stamp, Planning Commission's address and zoning classification stamps, ownership certification stamp (and notary stamp if in the City of Knoxville), and the Knox County Health Department certification stamp. In addition, the following surveyor's certification stamp for an exempt plat shall be included:

I certify that this plat qualifies under the provisions of Section 13-3-401 of the *Tennessee Code, Annotated* and is exempt from the requirements of the *Knoxville/Knox County Minimum Subdivision Regulations*, because (a) no new street or utility construction is required, and (b) all resultant tracts are five (5) acres or greater in size.

Surveyor: _____
Reg. No. _____ Date _____

46-50 Corrected Plats

46-50.1 A plat shall be considered as a corrected plat if an error is discovered after recording, and the correction of the error does not result in a change

affecting the size of any lot; the location of any property line or easement; add any new information that is not required for the correction; or eliminate any dedicated usage of the property (i.e. drainage or access easement)

46-50.2 A corrected plat shall identify the plat in the title block as a “Corrected Plat”; include a note stating what has been corrected on the plat; include the date of the corrected plat revision; and make reference to the instrument number of the previously recorded plat as recorded in the Register of Deeds Office.

46-60 Number of Copies Required for Review. For all administrative plats, four (4) paper copies shall be submitted for review when the property is within the City of Knoxville and only two (2) paper copies to be submitted for review when the property is only within Knox County’s jurisdiction.

47 AREA TO BE SURVEYED

47-10 Lot size determines the area that is to be surveyed. When a tract of land or parcel is subdivided into two (2) or more lots, all resulting lots shall be surveyed and included on the plat except in the case where the remaining portion of the property is five (5) acres or greater in area. If the remaining portion of the property is five (5) acres or greater in area, the plat shall include property lines as they depart from both corners common with remainder of tract. The surveyor shall certify on the plat that the balance of the property is five (5) acres or greater in area and identify the remaining acreage.

47-20 Date of original subdivision determines if remaining property is to be surveyed. If a plat is submitted that includes a portion of a lot from a previously recorded plat and the balance of the lot is under separate ownership, a variance will not be required for plat approval without the benefit of a survey for the balance of the lot, if the lot was transferred by deed prior to adoption of the *Knoxville/Knox County Minimum Subdivision Regulations* (July 8, 1971)

SECTION 6

DESIGN STANDARDS

61 PURPOSE

The purpose of this section is to assist in insuring that sound residential subdivision development will take place in Knox County by the establishment of minimum standards for use in the design of subdivisions. Alternative minimum standards for subdivisions located within the Hillside and Ridgetop Protection Area are located in Section 69 below.

62 STREETS AND ROADS

62-10 Conformance with the *Major Road Plan*, the *Transportation Improvements Program*, and/or the *Capital Improvements Program*. The subdivision of land and the design of roads servicing such land shall be undertaken in conformance with the *Major Road Plan*, the *Transportation Improvements Program* and the *Capital Improvements Program* of Knox County and the City of Knoxville. Dedication of streets, roads, and rights-of-way may be required to assure conformance with the plan or programs.

62-20 Relation to Adjoining Road Systems. A subdivision of a parcel of land shall be undertaken in such a manner as to enhance the sound development of the neighborhood in which the subdivision lies. The proposed road system of a subdivision shall generally provide for the continuance of existing or dedicated streets in adjoining or nearby tracts. In addition, dedication of rights-of-way shall be provided to the satisfaction of the Planning Commission for the connection of the subdivision to any adjoining unsubdivided land, to accommodate an increase in traffic resulting from the subdivision, to provide for harmonious development of the subdivision in relation to the neighborhood in which it lies, and for the general safety and welfare of those benefiting from the subdivision. Any or all of these criteria along with conformance to the *Major Road Plan*, the *Transportation Improvements Program*, and/or the *Capital Improvements Program* may be considered in requiring dedication of right-of-way as a prerequisite for subdivision approval.

62-30 Classification of Streets and Roads. Streets and roads shall be functionally classified as follows:

62-31 Interstate. A divided highway designated under the Interstate Highway System, designed for the safe, unimpeded movement of large volumes of through traffic with full access control and grade separation at intersections.

62-32 Expressways. A divided highway designed for the safe, unimpeded movement of large volumes of through traffic with full or partial access control that may contain both at-grade intersections and grade separated intersections.

62-33 Major Arterial. A street or road which provides major movement within the area, provides intercommunity connections to the local street system, and moves through traffic between activity centers. Access control is desirable.

- 62-34 Minor Arterial.** A street or road that augments the principal arterial system, carries trips of moderate length and moves through traffic between activity centers. Access control is desirable.
- 62-35 Major Collector.** A street or road that primarily provides for short distance traffic movements and primarily functions to collect and distribute traffic between local streets and high volume traffic generators and arterials.
- 62-36 Minor Collector.** A street or road that primarily functions to collect and distribute traffic between local streets and arterials and provides direct access to abutting land.
- 62-37 Local Street.** A minor street or road that provides direct access to abutting land. Local streets may be one of several types.
- 62.37-1 Marginal access streets are local streets generally having two (2) or more open ends. The ends generally connect with the same street. Other streets may intersect between the ends, and property fronts on only one (1) side of the street. The opposite street side is parallel and adjacent to a higher classification street such as a collector or arterial.
- 62-37.2 Loop streets are local streets having two (2) open ends with each end generally connecting with the same street. No other streets intersect between its two (2) ends, and property fronts on both sides of the street.
- 62-37.3 Cul-de-sac streets are local streets having only one (1) open end providing no access to another street. The closed end provides a turnaround circle for vehicles. No other street intersects between the two (2) ends, and property fronts on both sides of the street.
- 62-37.4 Dead-end streets are similar to cul-de-sacs except that they provide no turnaround circle at their closed end and are not permitted as streets in any proposed subdivision. Stub streets planned for future continuation are not considered to be dead-end streets.
- 62-38 Alleys.** Alleys are minor rights-of-way, dedicated to public use, which afford a secondary means of vehicular access to the back or side of properties otherwise abutting a street and which may be used for public utility purposes. Alleys generally have two (2) open ends and each end connects with a different street. The Planning Commission may approve the use of alleys as the sole means of vehicular access to lots located within a Traditional Neighborhood Development District, Historic Overlay District, Neighborhood Conservation Overlay District, Town Center District, or other adopted zoning districts that may allow this provision, subject to the applicable zoning ordinance requirements.
- 62-39 Alleys, Streets and Roads within South Waterfront Zoning Districts.** Alleys, streets and roads within Form Based Zone District regulations shall comply with the classification shown in the approved Regulating Plan and Streetscape Standards.

- 62-40 Right-of-Way.** Right-of-way widths shall meet the following requirements:
- 62-41 Streets Classified in the *Major Road Plan*.** Right-of-way widths for classified streets shall be provided in accordance with the requirements of the *Major Road Plan*. The minimum right-of-way widths for classified streets (both existing and proposed) are required by the *Major Road Plan* to accommodate future road, utility, sidewalk, and bikeway improvements. The maps and text of the *Major Road Plan* should be consulted to determine the required right-of-way width of a particular street segment.
- 62-42 Streets Not Classified in the *Major Road Plan*.** There will be occasions when new roads are proposed which were not included in the *Major Road Plan*. The *Major Road Plan* will be amended to include these new roads, their functional classifications, and right-of-way requirements. When roads are proposed which are not classified by the *Major Road Plan*, right-of-way shall be provided based on the projected function and use of the road in accordance with the following:
- 62-42.1 **Expressways, Arterials, and Major Collectors.** Right-of-way widths for future expressways, major and minor arterials, and major collectors which are not currently classified shall be determined by the government agencies responsible for design and construction. Relevant agencies may include the Tennessee Department of Transportation, the Knox County Division of Engineering and the City of Knoxville Engineering Division.
- 62-42.2 **Minor Collectors.** The minimum right-of-way for a minor collector that is not currently classified shall be seventy (70) feet.
- 62-42.3 **Local Streets.** The minimum right-of-way for a local street shall be fifty (50) feet.
- 62-42.4 **Alleys.** Alleys shall have sufficient right-of-way to adequately serve the anticipated vehicular traffic.
- 62-42.5 **Joint Permanent Easements.** Widths of joint permanent easements shall be provided in accordance with the standards set forth in 64-24, "Lot Access".
- 62-43 Streets Classified within South Waterfront Zoning Districts.** Alleys, streets and roads classified within Form Based Zone District regulations shall comply with the right-of-way requirements shown in the approved Regulating Plan and Streetscape Standards.
- 62-50 Pavement Widths.** Pavement widths shall meet the following requirements:
- 62-51 Expressways, Arterials, and Major Collectors.** The required pavement width of expressways, arterials, and major collectors shall be determined by the relevant government agencies. Relevant agencies may include the Tennessee Department of Transportation, the Knox County Engineering Division and the City of Knoxville Engineering Division.

- 62-52 Minor Collectors.** New minor collectors proposed for development shall have a minimum pavement width of thirty-two (32) feet. The required pavement width for existing minor collectors shall be determined by the relevant government agencies. Relevant agencies may include the Tennessee Department of Transportation, the Knox County Engineering Division and the City of Knoxville Engineering Division.
- 62-53 Local Streets.** Local streets shall have a minimum pavement width of twenty-six (26) feet.
- 62-54 Alleys.** Alleys shall have sufficient pavement widths to adequately serve the anticipated vehicular traffic.
- 62-55 Joint Permanent Easements.** Pavement widths for joint permanent easements shall be provided in accordance with the standards set forth in Section 64-24, "lot access."
- 62-56 Streets Classified within a South Waterfront Zoning Districts.** Alleys, streets and roads classified within South Waterfront Zoning Districts shall comply with the pavement width requirements shown in the approved Regulating Plan and Streetscape Standards.
- 62-60 Grades of Streets.** Grades of streets and roads shall be as follows:
- 62-60.1 **Minimum Grade.** The minimum grade of any street or road shall be not less than one (1) percent.
- 62-60.2 **Expressway Maximum Grade.** The maximum grade on expressways shall not exceed five (5) percent.
- 62-60.3 **Major Arterial Maximum Grade.** The maximum grade on major arterials shall not exceed six (6) percent.
- 62-60.4 **Minor Arterial Maximum Grade.** The maximum grade on minor arterials shall not exceed six (6) percent.
- 62-60.5 **Major Collector Maximum Grade.** The maximum grade on major collectors shall not exceed eight (8) percent.
- 62-60.6 **Minor Collector Maximum Grade.** The maximum grade on minor collectors shall not exceed ten (10) percent.
- 62-60.7 **Local Street Maximum Grade.** The maximum grade on a local street shall not exceed twelve (12) percent. However, when special topographical or other conditions justify, the Planning Commission, on the recommendation of the Knox County Engineering Division or the City of Knoxville Engineering Division may increase the maximum allowable grade on a local street up to fifteen (15) percent.
- 62-70 Horizontal and Vertical Curves and Tangents.** For safety of travel, curves and tangents shall be as follows:

62-71 Horizontal Curves. Where a deflection angle of more than ten (10) degrees in the alignment of a street occurs, radii shall be introduced according to the following standards:

62-71.1 On major arterials, the minimum allowable horizontal radius of curvature at the centerline of the proposed road right-of-way shall be not less than nine hundred twenty (920) feet.

62-71.2 On minor arterials, the minimum allowable horizontal radius of curvature at the centerline of the proposed road right-of-way shall be not less than nine hundred twenty (920) feet.

62-71.3 On major collectors, the minimum allowable horizontal radius of curvature at the centerline of the proposed road right-of-way shall be not less than five hundred sixty (560) feet.

62-71.4 On minor collectors, the minimum allowable horizontal radius of curvature at the centerline of the proposed road right-of-way shall be not less than four hundred (400) feet.

62-71.5 On local streets greater than one thousand (1000) feet in length, the minimum allowable horizontal radius of curvature at the centerline of the proposed road right-of-way shall be not less than two hundred fifty (250) feet. On local streets less than one thousand feet in length, the minimum allowable horizontal radius of curvature at the centerline of the proposed road right-of-way shall be not less than one hundred (100) feet.

62-72 Vertical Curves. All changes in grade shall be connected by vertical curves of minimum length in feet equal to fifty (50) times the algebraic difference in percents of grade for major and minor arterials and major and minor collectors, and one-half this minimum length for other streets.

62-73 Tangents for Reverse Curves. Reverse curves in road right-of-way shall be connected by tangents of not less than one hundred fifty (150) feet for major and minor arterials, one hundred (100) feet for major collectors, seventy-five (75) feet for minor collectors, and fifty (50) feet for local streets.

62-74 Tangents for Broken Back Curves. Broken back curves in road right-of-way, as defined in these regulations, shall be connected by tangents of not less than one hundred seventy-five (175) feet for major collectors, one hundred seventy-five (175) feet for minor collectors, and one hundred fifty (150) feet for local streets.

62-80 Intersections and Street Jogs. Requirements for intersections and street jogs shall be as follows:

62-81 Angle of Intersection. Roads within a subdivision shall be laid out so that intersections shall be as nearly as possible at right angles, and in no case shall the intersection of roads yield angles of less than sixty (60) degrees.

62-82 Grades at Intersections. The maximum grade of any street at the approach to an intersection shall be one (1) percent. A grade of up to three (3) percent may be approved by the Knoxville Engineering Division or the Knox County Engineering Division. A vertical curve must be used to connect the intersection grade at the approach and subsequent changes in grade, and may begin at the edge of pavement of the intersecting street. The length for local streets connecting vertical curve shall not be less than twenty-five (25) times the algebraic difference in percents of grade.

62-82.1 For the non-continuous leg of a T-intersection of two (2) local streets, the length of the connecting vertical curve shall not be less than fifteen (15) times the algebraic difference in percents of grade.

62-82.2 For all other conditions, including four-way intersections of local streets, and intersections of local streets with major collectors, minor collectors, major arterials, and minor arterials, the length of the connecting vertical curve shall not be less than twenty-five (25) times the algebraic difference in percents of grade.

62-83 Maximum Grade in the Bulb of Cul-de-Sac Streets. The maximum grade in the bulb of cul-de-sac streets shall not exceed ten (10) percent. The maximum grade in the bulb of cul-de-sac streets shall be a minimum of two (2) percent less than the grade of the land in its preconstruction state where the grade of the land is between four (4) and twelve (12) percent. The maximum cross-slope shall not exceed three (3) percent.

62-83.1 Measurement of Maximum Grade in Cul-de-Sac. The maximum grade is to be measured along the proposed centerline of the roadway extended through the center of the cul-de-sac bulb.

62-83.2 Measurement of Cross-Slope. The cross-slope of the cul-de-sac bulb is to be measured on a line ninety (90) degrees to the centerline of the roadway extended to pass through the center of the cul-de-sac bulb.

62-84 Radii of Property Lines and Curbs at Intersections in Agricultural and Residential Zones. The minimum curb and property line radius at corners of intersections in residential and agricultural zones shall not be less than the values shown in the table below.

Corner Angle (Degrees)	Minimum Curb and Property Line Radius (Feet)
60	25'
75	25'
90	25'
105	75'
120	75'

62-85 Radii of Property Lines and Curbs at Intersections in Office, Commercial, and Industrial Zones. The minimum curb and property line radius at corners of

intersections in office, commercial, and industrial zones shall not be less than 75 feet. A radius reduction to 50 feet may be approved by the Knoxville Engineering Division or the Knox County Engineering Division.

62-86 Substitution of a Three-Centered Compound Curve for a Normal Single Radius Curve. In the case that a normal curve does not provide adequate turning radius for the vehicles on the facility, then the City of Knoxville Engineering Division or the Knox County Engineering Division may determine that a three-centered compound curve is necessary to obtain the required turning radius.

62-87 Intersection Placement. The intersections of streets shall be spaced in accordance with the specifications of the City of Knoxville Engineering Division or the Knox County Engineering Division in their respective jurisdictions. The minimum spacing between intersections is based on the street classification of the road between both intersections, as follows, and is measured from centerline to centerline.

Intersection Class	Spacing (Feet)
Local	125'
Collector	300'
Arterial	400'

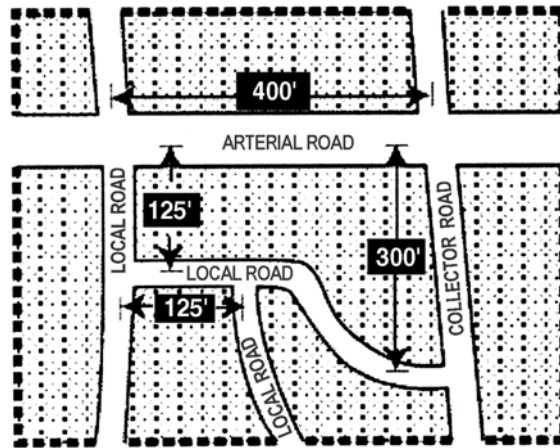


Fig. 62-87

Minimum intersection spacing based on street classification, measured from centerline to centerline.

62-88 Corner Sight Distance. The minimum corner sight distance at the intersection of any two (2) streets regardless of classification shall be measured from a point on the minor road at least fifteen (15) feet from the edge of the major road pavement and measured from the pavement surface to a height of eye at three and one-half (3.50) feet on the minor road to a height of object at four and one-quarter (4.25) feet above the pavement surface on the major road. The minimum standards for corner sight distance are as follows for various design speeds on the major roads:

Design Speed (mph)	Corner Intersection Sight Distance (feet)
60	600
50	500
40	400
30	300
20	250

62-89 Intersections within South Waterfront Zoning Districts shall comply with alignments shown in the approved Regulating Plan and Streetscape Standards.

62-90 Other Street and Road Design Standards. Other street and road design standards shall be as follows:

62-91 Street Names. Streets which are obviously in alignment with existing streets shall generally bear the name of the existing street. New interior subdivision streets that are continuous and obviously in alignment shall bear the same name. Street names shall not duplicate or closely approximate the names of existing streets in Knoxville and Knox County. All public streets running east and west shall be designated as “Drive” or “Avenue”. All public streets running north and south shall be designated as “Street” or “Road”. Dead-end public streets that cannot be extended shall be designated as “Lane”. The use of the designation of “Boulevard” is subject to the approval of the Planning Commission when the road is designed with a median separating the lanes of traffic or the street serves as the entrance into the subdivision and has the appearance of a boulevard street. Private easements serving six (6) or more dwelling units shall be designated as “Way”.

62-92 Reserve Strips. Reserve strips controlling access to streets shall be prohibited except where their control is placed in the county or city under conditions approved by the Planning Commission.

62-93 New Half and Existing Streets. New half, or partial, streets shall not be permitted. Whenever a proposed subdivision borders on existing or partial streets, the remaining undeveloped part of the street shall generally be plotted within the proposed subdivision.

62-94 Additional Width on Existing Streets. Subdivisions that adjoin existing streets shall dedicate additional rights-of-way as required by the *Major Road Plan*. The entire right-of-way shall be provided where any part of the subdivision is on both sides of the existing street. When the subdivision is located on only one (1) side of an existing street, one-half of the required right-of-way, measured from the centerline of the existing roadway, shall be provided.

62-95 Cul-De-Sacs or Dead-End Streets. All dead-end streets which serve two (2) or more lots on the same side of the street shall provide adequate turnaround space.

62-95.1 Cul-De-Sacs. The cul-de-sac shall have a right-of-way radius of fifty (50) feet and a transition curve radius of no less than seventy-five (75) feet. Paved area of the cul-de-sac shall have a radius of not less than forty (40) feet.

62-96 Extension of Street. All streets shall be designed so that they may be feasibly extended into adjacent property.

62-97 Alleys. Alleys shall be governed by the following regulations:

62-97.1 Alleys shall not be provided in residential areas, except where the developer produces evidence satisfactory to the Planning Commission of the need for alleys.

62-97.2 Alleys shall be provided in commercial and industrial areas except that the Planning Commission may waive this requirement where other definite and assured provisions are made for service areas, such as offstreet loading, unloading, and parking consistent with and adequate for the uses proposed.

62-97.3 Dead-end alleys shall be prohibited.

63 SIDEWALKS AND STREET FURNITURE

63-10 Sidewalk Location Required. For the safety of pedestrians and children at play, the Planning Commission may require that sidewalks be provided for access to schools, recreational facilities, commercial establishments, or any other areas where obvious future pedestrian traffic is anticipated. Whenever sidewalks can be connected to existing walks or proposed walks in adjacent areas, such proposed walks should be designed on that side of the street which will make this connection possible.

63.11 Within South Waterfront Zoning Districts sidewalks shall be provided at the time of development in accordance with the approved Regulating Plan and Streetscape Standards.

63-20 Position and Width. Sidewalks shall be located not less than one (1) foot from the property line to prevent interference or encroachment by fencing, walks, hedges, or other planting or structure placed on the property line at a later date. The inner edge of a sidewalk should not be closer than five (5) feet to the street pavement. Sidewalks shall have a minimum width of four (4) feet.

63-21 Within South Waterfront Zoning Districts sidewalks shall be provided at the time of development in accordance with the approved Regulating Plan and Streetscape Standards.

63-30 Street Name Signs. A street name sign of a design and material approved by appropriate governmental agencies shall be installed at all street intersections. Such sign installation shall be under the supervision of the appropriate governmental agency that shall determine the location.

63-40 Landscaping. In the design of subdivision, wherever possible, existing trees shall be preserved. Provision should be made to assure the growth of all landscaping material. All property between street pavement and curb and right-of-way line shall be backfilled and seeded.

64 BLOCKS AND LOTS

64-10 Blocks. The design of blocks in regard to length, width, and shape should reflect adequate provision for building sites, needs for access and circulation, and limitations created by topographic features.

64-11 Pedestrian Mid-Block Sidewalks. Pedestrian mid-block sidewalks may be required to provide access to schools, recreational facilities, or commercial establishments, and improve pedestrian circulation where block lengths are excessive.

64-20 Lots. Land for subdivision purposes shall be so selected as to provide sound building sites on suitable lots. The design and preparation of lots shall be undertaken, and the approval of such lots, shall be based on the following standards:

64-21 Lot Drainage and Topography. Lot drainage and topography shall meet the following requirements:

64-21.1 Lots shall contain building sites which are well drained.

64-21.2 Lots shall not be excessively steep or contain excessive amounts of surface or near-surface rock.

64-21.3 Building sites and sites for drain fields shall not be traversed by water and/or drainage courses and ditches.

64-21.4 Fill dirt shall not be placed upon sites which are to be used for drainfields.

64-22 Lot Area and Building Setback Line. Lot area, width, depth, and minimum building setback line for residential or nonresidential use shall meet the minimum standards required by the *Knox County Zoning Ordinance* or the *Knoxville Zoning Ordinance*.

64-23 Lots with Individual Sewage Treatment. Lot area and shape for lots with individual sewage treatment facilities shall be determined by the *Knoxville Zoning Ordinance* or the *Knox County Zoning Ordinance* and the regulations of the Knox County Health Department.

64-24 Access. All lots shall have either frontage of not less than twenty-five (25) feet in width on a public street or an approved exclusive permanent easement or joint permanent easement giving access to a public street. Such access shall meet the following standards:

64-24.1 Such frontage or easement shall provide readily apparent physical means of pedestrian and vehicular access (traversable access in compliance with Section 64-24) from the lot(s) onto the street. The area of the access easement, or access strip in the case of a flag lot, shall not be included in computing the lot area. The plat shall identify both the total area of the

lot and the area excluding the access easement or access strip for the flag lot. Such frontage is also required for those lots approved with an alley as the sole means of vehicular access under the applicable Zoning Ordinance requirements for the Traditional Neighborhood Development District, Historic Overlay District, Neighborhood Conservation Overlay District, Town Center District, or other adopted zoning district that may allow this provision.

64-24.2 Where an exclusive permanent easement, which serves only one (1) lot, or a joint permanent easement, which serves two (2) or more lots, is provided for access in lieu of frontage, such easement shall be shown on the subdivision plat along with all engineering data necessary to locate the easement on the ground. The deed or other legal document in which the easement has been, or is to be, recorded must be approved by the appropriate law department, city or county, as to legality and permanence of easement, and a written statement of the law department's approval must be submitted prior to certification for recording. Reference to such deed or other legal document shall also be shown on the plat.

64-24.3 An exclusive permanent easement shall only serve one (1) lot, shall have access to a public street and shall not be less than twenty-five (25) feet in width. The driveway width and surface material shall meet the applicable requirements of the Knoxville Zoning Ordinance or Knox County's *Access Control and Driveway Design Policy*. A lot shall be considered to be served by an exclusive permanent easement if the lot has no other legal means of access as required by Section 64-24.

64-24.4 All joint permanent easements shall meet the following standards:

64-24.41 The Planning Commission may approve joint permanent easements serving two (2) or more lots. A lot shall be considered to be served by a joint permanent easement if the lot abuts the joint permanent easement and has legal traversable access to the easement.

64-24.42 Subdivisions with joint permanent easements shall conform to the general purpose of these regulations as stated in Section 11. More specifically, the subdivision shall be considered in the context and pattern of neighboring developments and shall not create double frontage lots except as directed in Section 64-25. Joint permanent easements shall not be approved if it will create a connection between two (2) public roads.

64-24.43 Sight distance shall be adequate, as specified in Section 62-88, corresponding to the design speed of the intersecting road. All joint permanent easement locations must be traversable, as specified in Section 64-24.1 with a maximum grade of twelve (12) percent.

64-24.44 Joint permanent easements shall not be less than forty (40) feet in width. The area of the joint permanent easement shall

be designated as a private right-of-way and shall not be included as a part of the lots and lot area calculations. The area of the joint permanent easement shall be included on the plat.

- 64-24.45 All dead end joint permanent easements shall provide a suitable turnaround meeting American Association of State Highway and Transportation Officials guidelines.
- 64-24.46 A homeowners association or other legal entity shall be established that addressed maintenance of the easement. The applicant must demonstrate to the reasonable satisfaction of the Planning Commission that the easement will be properly maintained.
- 64-24.47 A note shall be placed on the Final Plat that the joint permanent easement is not a public road and will not be maintained by the City of Knoxville or Knox County.
- 64-24.48 Joint permanent easements shall also function as a utility easement and a note shall be placed on the Final Plat specifying their use as such.
- 64-24.49 Joint permanent easements that serve nonresidential lots, or lots that are to be used for duplex or multi-dwelling structures or development, shall be subject to the requirements of Section 64-24.6.

64-24.5 Joint permanent easements serving less than six (6) lots shall meet the following additional standards:

- 64-24.50 Roadway construction standards shall be approved by the Knoxville Engineering Division or the Knox County Engineering Division. A minimum twenty-foot (20') wide, unobstructed driving surface shall be required, capable of supporting the imposed loads of emergency apparatus under all weather conditions. In the city, the driving surface must be paved. In the county, a gravel surface may be permitted, although paving may be required, particularly for erosion control when the road grade exceeds eight (8) percent.
- 64-24.51 A road profile may be required to determine whether a proposed joint permanent easement will be traversable.
- 64-24.52 Any subdivision of land that creates additional lots that will be served by an existing joint permanent or extend the joint permanent easement, shall be subject to the requirements of Section 64-24.4 and as applicable, Sections 64-24.5 or 64-24.6. A note shall be placed on the Final Plat to that effect.

64-24.6 Joint permanent easements serving six (6) or more lots. Joint permanent easements serving six (6) or more lots or a system of joint permanent easements where the total number of lots is six (6) or more, shall meet the following standards:

64-24.61 Joint permanent easements serving six (6) or more lots, shall meet the same construction standards as a public road, except as follows. The Planning Commission may reduce the required width of the easement to forty (40) feet and requirements for curbs may be waived unless otherwise recommended by the Knoxville Engineering Division or the Knox County Engineering Division based on the drainage and traffic characteristics of the subdivision. The Planning Commission may reduce the required pavement width to twenty-two (22) feet, unless otherwise recommended by the Knoxville Engineering Division or the Knox County Engineering Division, if an appropriate amount of guest parking is provided.

64-24.62 A road profile and pavement section shall be required. Joint permanent easements serving six (6) or more lots that do not conform to the public road standards of Section 62 must obtain variance approval by the Planning Commission as outlined in Section 82.

64-24.63 All joint permanent easements that serve six (6) or more dwelling units or buildings in non-residential developments shall be named in conformance with applicable street naming ordinances.

64-25 Double Frontage Lots. Double frontage lots shall 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.

64-25.1 When double frontage lots are created within a development, all buildings may be required to face the interior road system and all vehicular access may be required from the interior road system.

64-26 Corner Lots. Corner lots for residential use shall be of sufficient width to permit compliance with the required minimum building setback line on all property lines which abut streets. In order to comply with the additional width requirement and continue the same size building site, as on adjoining lots, corner lots shall be increased to whatever width is necessary.

64-27 Land Remnants. If, after subdividing, remnants of land exist which have no apparent future use that can be properly controlled, they shall be incorporated into the lots of the proposed lotting scheme.

64-28 Lot Lines. Side lot lines shall generally be at right angles to straight street centerlines, and radial to curved street centerlines. Rear lot lines should consist of straight lines with a minimum number of deflections.

64-29 Lots on Collectors or Arterials. Residential lots having access only from a collector or arterial street may be required to provide vehicular turnaround on the lot in order to minimize backing out onto the public street.

65 STORM DRAINAGE

65-10 General. These standards for the design of storm drainage systems are established to forestall flooding and ponding of water on streets, lots, building sites, dwellings, and sites for drainfields of individual subsurface sewage disposal systems and to prevent erosion. In addition, these standards are designed to prevent damage from increased stormwater runoff and changed drainage patterns created by subdivision of the land.

65-20 Storm Drainage Plan. A storm drainage plan shall be provided by the developer which includes accurate existing and proposed watercourses; the system of open channels, pipes, culverts, drains, inlets, catchbasins, and similar facilities designed to handle stormwater in times of rainstorms. The calculations used in the design of such systems and plans shall clearly indicate the easements required in the construction and maintenance of the drainage system. Said easements shall be shown on the preliminary and final plats.

65-30 Drainage of Sinkholes and Other Low Places. Property containing sinkholes and other low places may be subdivided; however, the subdivision shall be designed so as to yield lots with building sites and subsurface sewage disposal facilities which shall be free of the danger of flooding.

65-40 Flooding of Subdivisions along Watercourses. Land within any floodway zone or district shall not be platted for residential occupancy or other building site and shall not be raised by fill. Other land within Knox County which is subject to flooding shall be subdivided according to the requirements as set forth in the flood damage prevention ordinances for Knoxville and Knox County.

65-41 Along Streams and Drainage Channels Designated as Floodway Fringe Areas. Land designated as floodway fringe areas in the *Knoxville Zoning Ordinance* or *Knox County Zoning Ordinance* shall not be platted unless the developer demonstrates to the satisfaction of the Planning Commission that such land has been filled and approved by the City Engineer or County Hydrologist in accordance with provisions of the *Knoxville Zoning Ordinance* or *Knox County Zoning Ordinance*.

65-41.1 Along Small Streams and Drainage Channels. Land within fifty (50) feet of the center of the channel shall not be platted unless the developer demonstrates to the satisfaction of the Planning Commission that a lesser distance (but not less than fifteen (15) feet) is adequate, based on the watershed area, the probable runoff, and other topographic and hydraulic data prepared by a competent engineer.

66 SANITARY SEWERAGE

- 66-10 General.** These standards for development of sanitary sewer systems are established to insure healthful living conditions and protect the health of the community, to provide the best possible method of waste disposal, and to provide the necessary current and future sanitary disposal systems at the least ultimate cost to the community and individual homeowners.
- 66-20 Sanitary Sewer Plan.** A sanitary sewer plan shall be provided by the developer which includes a plan and profile for all existing and proposed sewer mains, laterals, lot connections with existing systems; individual package treatment plants or subsurface individual sewage systems when such are provided for each lot.
- 66-30 Sanitary Sewer Systems.** Sanitary sewer systems shall be provided in accordance with the following standards:
- 66-31 Public Sewer Systems.** In the City of Knoxville and that portion of unincorporated Knox County, wherever public sanitary sewer systems are reasonably available, a subdivision shall be so designed to be served by this sanitary sewer system.
- 66-32 Community Sewer Systems.** Whenever a developer can provide conclusive evidence to the Planning Commission that public sewer systems are not reasonably available and, further, whenever acceptable to the County Health Department, the developer may design the subdivision to be served by a community sewer system.
- 66-33 Individual Sewage Treatment.** If the developer can provide conclusive evidence to the Planning Commission that public sewers are not reasonably available and community sewers are not feasible or are not acceptable to the County Health Department, the developer may design the subdivision to be served by individual subsurface sewage treatment systems, provided that the following conditions be met:
- 66-33.1 All lots served by individual subsurface sewage treatment systems shall be approved by the County Health Department.
- 66-34 Prohibited Development.** No subdivision shall be developed with lots not served by public sewers, community sewers or individual sewage treatment systems.

67 UTILITIES AND REQUIRED EASEMENTS

- 67-10 General.** These standards for the design and construction of utilities are established to insure that all proposed subdivisions are provided with adequate, safe, and sufficient utility services.
- 67-20 Water Supply.** Every lot in all proposed subdivisions shall have available a public water supply, or an individual water supply if a public water supply cannot be feasibly provided.

- 67-21 Installation and Maintenance of Systems.** All subdivision water supply systems shall be designed, installed, and maintained in accordance with state and local regulations.
- 67-22 Individual Water Supply.** In subdivisions which cannot feasibly provide a public water supply, the subdivision shall be so designed as to provide an individual water supply to each and every lot; provided, however, that no lots of less than one (1) acre shall be developed on individual water supply systems and, no lots in the City of Knoxville and no lot served by a utility district of Knox County with a public water supply, shall be developed on an individual water supply system.
- 67-30 Electric, Gas, Telephone, and Other Utilities.** All utility services shall be so designed as to conform with all appropriate state, local, and utility agency requirements.
- 67-31 Underground Distribution.** All telephone and electrical systems shall be designed to be underground, unless this is not economically feasible in the judgment of the utility company involved.
- 67-40 Utility and Drainage Easements.** Easements of five (5) feet in width, situated along both sides of all interior lot lines in a subdivision, shall be dedicated to the public and to appropriate utilities agencies. These required easements shall be ten (10) feet in width inside all exterior lot lines, including road right-of-way lines, where the adjoining lot or property is not subject to a similar easement at least five (5) feet in width. Other special drainage and utility easements may be required. Such dedication shall be noted on the Final Plat of a subdivision.
- 67-41 Easements: Zero Lot-Line Development.** All easements required in Section 67-40 shall apply to zero lot line developments, except that no easements shall be required along interior lot lines underneath buildings.

68 PUBLIC OPEN SPACES

For the purpose of providing for adequate public land, the Planning Commission may require the dedication or reservation of usable open space within a subdivision up to a total of ten (10) percent of the gross area or water frontage of the subdivision for park, school, or recreation purposes.

69 ALTERNATIVE DEVELOPMENT STANDARDS

69-10 Hillside and Ridgetop Protection Area Development Standards.

69-11 Purpose. The purpose of this section is to establish alternative street design standards, setbacks and lot sizes for subdivisions and development within the Hillside and Ridgetop Protection Area (HRPA) as established by the *Hillside and Ridgetop Protection Plan*, as adopted by the City of Knoxville in 2011 and Knox County in 2012. The foundation of these regulations is the desire to minimize the disturbance of natural land within the protection area in order to preserve its capacity to accommodate storm events, to protect valuable vegetation that contributes to the enhancement of air and water quality, and to minimize damage to the land and structures within and outside the HRPA caused by downhill and

downstream flooding and severe erosion. The intent of these regulations is to promote low impact development on sensitive lands within the protection area through regulations that represent an alternative to regulations described elsewhere in the Subdivision Regulations.

This section shall supersede any other provision of the Subdivision Regulations as set forth herein and is expressly applicable to subdivisions and development of land within the HRP.

69-12 Applicability. These standards may be applied within the established HRP, subject to the following criteria:

69-12.1 The development is subject to development plan approval by the planning commission as required by a planned zone district; and

69-12.2 The planning commission finds that the proposed development preserves and protects undisturbed land consistent with the intent of the land disturbance recommendations of the *Hillside and Ridgetop Protection Plan*.

69-13 Street Standards. The following street standards may be approved by the planning commission for development within the HRP, provided that design plans are approved by the City and County engineering divisions, whichever is appropriate:

69-13.1 Right-of-Way Widths. The minimum width for a right-of-way for a local street may be reduced to forty (40) feet.

69-13.2 Grade of Streets. The maximum grade for a local street may be up to fifteen (15) percent.

69-13.3 Horizontal Curves. The minimum allowable horizontal radius of curvature at the centerline of a local street may be reduced to one hundred and five (105) feet; consistent with AASHTO standards for a twenty-five (25) mph design speed with an eight (8) percent super elevation (banking of the curve);

69-13.4 Pavement Widths. The minimum pavement width for a local street may be reduced to twenty (20) feet; and in areas that are demonstrated to have slopes greater than forty (40) percent, the minimum pavement width may be reduced to twelve (12) feet of pavement, with two (2) foot shoulders on both sides, provided the subdivision road system on such slopes is designed for one-way traffic.

69-13.5 Curbs. The requirement for curbs may be waived, provided that adequate edge of pavement and storm water conveyance are constructed.

69-13.6 Parking within the Right-of-Way. Parallel parking areas may be approved outside the minimum width of pavement. Such parallel parking areas may be configured to accommodate up to four (4) vehicles in a parking bay, provided the area is separated from any other parking

areas by no less than twenty (20) feet of landscaped area. Parking areas shall not interfere with minimum sight distance requirements.

69-13.7 For streets both inside and outside of the HRP. For continuous streets that lie both within and outside the HRP, the appropriate street improvements may be approved by the planning commission upon consideration of the topographic conditions and estimated traffic volume of the street.

69-14 Lots

69-14.1. Minimum Lot Dimensions. The minimum lot size, lot width and lot depth shall be approved by the planning commission; provided that lots are large enough to satisfy the requirements of the adopted building codes of the City of Knoxville and Knox County.

69-14.2. Minimum Lot Frontage. The minimum lot frontage shall be twenty-five (25) feet.

69-15 Minimum Yard Requirements. The minimum yard requirements for front, side and rear yards on residential lots shall be approved by the planning commission, except that the periphery boundary setback, when not a front yard setback, shall conform to the requirements of the City of Knoxville and Knox County zoning ordinances.

SECTION 7

REQUIRED IMPROVEMENTS

71 PURPOSE

The purpose of this section is to establish the minimum standards to which the developers must conform in providing and constructing physical improvements for subdivisions, so as to implement the design standards set forth in Section 6 of these regulations.

72 STREET AND ROAD IMPROVEMENTS

72-10 Construction Standards. The construction of all streets, roads, and alleys shall be in accordance with the design standards set forth in Section 62 of these regulations and in accordance with the construction standards required by the Knoxville Engineering Division or the Knox County Engineering Division in their respective jurisdictions. The subgrade of all streets, irrespective of classification, shall extend a minimum of two (2) feet on each side of the installed pavement and curb but not extend beyond the full required right-of-way.

72-11 Base. The base of all streets shall be of crushed stone and shall be compacted and appropriately sealed in accordance with the specifications of the Knoxville Engineering Division or the Knox County Engineering Division within the unincorporated area of Knox County. The minimum standards for thickness of base after compaction is as follows:

72-11.1 Asphalt Streets

Classification	Thickness (Inches)
Local	8
Collector	10
Arterial	8
Industrial/Commercial	8

72-11.2 Concrete Streets

Classification	Thickness (Inches)
All Classification	4

72-12 Surface. The surface of all streets shall be either plant mix asphalt or concrete and shall meet the specifications of the Knoxville Engineering Division or the Knox County Engineering Division. The minimum standards for thickness of surface is as follows:

72-12.1 Asphalt Streets

Classification	Thickness (Inches)
Local	2
Collector	5
Arterial	8
Industrial/Commercial	8

72-12.2 Concrete Streets

Classification	Thickness (Inches)
Local	5
Collector	7
Arterial	9
Industrial/Commercial	9

- 72-13 Additional Requirements.** On all streets classified higher than local streets, or when the Knoxville Engineering Division or the Knox County Engineering Division determines base and surfacing in excess of the minimum to be necessary, the subdivider shall provide such additional base and surface as required.
- 72-14 Unpaved Portion of Right-of-Way.** The developer and/or subdivider shall, in areas from lot line to the curb, smooth and seed or sprig such areas with suitable grass within thirty (30) days of final grading.
- 72-20 Costs.** The cost of the required street and road improvements shall be borne by the developer for each classification of street as follows:
- 72-21 Expressways and Arterials.** The developer shall be required to dedicate sufficient right-of-way as specified in Section 62 of these regulations. Pavement and construction costs for expressways and arterials will normally be provided for by the appropriate government agencies. Where an expressway or arterial is to be a State or U.S. Highway, the amount of right-of-way to be dedicated shall be as determined by the Tennessee Department of Transportation.
- 72-22 Major Collectors.** The developer shall be required to dedicate sufficient right-of-way as specified in Section 62 of these regulations. The developer shall further be required to assume pavement and construction costs equivalent to that which would be incurred in providing a thirty-two (32) foot minor collector, such costs to be determined by the Knoxville Engineering Division or the Knox County Engineering Division. Construction and pavement costs above the equivalent of a minor collector shall be provided for by the appropriate governmental agencies. Where a collector is to be a State or U.S. Highway, the amount of right-of-way to be dedicated shall be as determined by the Tennessee Department of Transportation.
- 72-23 Minor Collectors and Local Streets.** The developer shall be required to dedicate sufficient right-of-way as specified in Section 62 of these regulations. The cost of construction and pavement shall be provided for by the developer in accordance with the design standards set forth for minor collectors and local streets in Section 62 of these regulations, and the construction as determined by the Knoxville Engineering Division or the Knox County Engineering Division.
- 72-24 Curbs and Gutters.** The subdivider shall provide permanent six (6) inch concrete curbs with twenty-four (24) inch integral concrete gutters; standard rolled curbs and concrete or asphalt gutters; or other construction approved by the Planning Commission and other appropriate agencies.

72-25 Alleys. Where alleys are permitted or required by the Planning Commission, the developer shall provide sufficient right-of-way as indicated by the subdivision design and as approved by the Planning Commission and the Knoxville Engineering Division or the Knox County Engineering Division. The cost of construction and pavement shall be borne by the developer in accordance with the construction standards required by the Knoxville Engineering Division or the Knox County Engineering Division.

73 SIDEWALKS AND STREET FURNITURE

73-10 Construction of Sidewalks. Sidewalks shall be provided by the developer in accordance with the design standards set forth in Section 63 of these regulations. They shall be constructed of four (4) inch concrete on a compacted base.

73-20 Street Signs. Street signs shall be provided in accordance with Section 63-30 of these regulations.

74 MONUMENTS, PINS AND REFERENCE

74-10 Permanent Reference Markers and Monuments. Permanent reference markers and/or monuments, as defined in Section 2, shall be required for all subdivisions of five (5) lots or more, and placed at not less than two (2) locations within, or on the boundary, of the record plat area and at such intermediate points as shall be required by the appropriate city or county agency. The location of all such markers and/or monuments shall be shown on the Design Plan and Final Plat.

74-20 Iron Pins. Iron pins one-half (1/2) inch in diameter and at least thirty (30) inches long shall be placed at all points on subdivision boundary lines where there is a change of direction and at all lot corners. These pins shall be placed only after all grading of the area and sidewalk construction have been completed. A guard stake at least one (1) inch by three (3) inches by twenty-four (24) inches in size shall be placed next to each pin with the lot number and number of the adjoining lot plainly lettered on the flat faces of the stake.

74-30 Benchmarks. At least one (1) benchmark, as defined in Section 2 of these regulations, shall be installed in all subdivisions of five (5) lots or more, or a suitable monument referenced to an existing benchmark.

75 STORM DRAINAGE

75-10 Required Drainage Improvements. Adequate drainage systems, including necessary open ditches, improved ditches, culverts, pipes, intersectional drains, drop inlets, and bridges, shall be provided for the proper drainage of all surface water in accordance with the drainage plans as set forth in Section 65-20 of these regulations. The developer shall provide an adequate drainage system to carry the flow of surface water from his subdivision or development area to an established county drain or natural watercourse.

75-20 Construction Standards. All storm sewers, culverts, ditch improvements or other drainage systems shall be constructed by the developer in accordance with the standards required by the city engineer or county hydrologist.

75-30 Cost of Systems. The cost of systems to drain each subdivision or development shall be borne by the developer.

76 SANITARY SEWERAGE

76-10 Required Public Sanitary Improvements. Wherever sanitary sewer systems are to be provided in a subdivision, adequate public sanitary sewer systems, including all necessary mains, sub-mains, laterals, individual lot connections, manholes, pumping stations, and other appropriate sewer facilities as required by state and local regulations and/or the County Health Department, shall be provided by the developer.

76-20 Required Community Sewer Systems. Wherever community sewers are to be provided, they shall be designed and constructed as required by all appropriate state and local regulations and/or the County Health Department. All components of community sewer systems shall be designed to meet the same specifications as those of the public sanitary sewer systems.

76-30 Individual Sewage Disposal Systems. Wherever individual sewage disposal systems are to be provided, they shall be designed and constructed as required by all appropriate state and local regulations and/or the County Health Department.

77 UTILITIES

77-10 General. All utilities shall be developed in accordance with appropriate state, local, and utility agency requirements, and meet the design standards contained in Section 67 of these regulations.

77-20 Water Supply. Every subdivision served by a public water supply shall be provided with a complete water distribution system adequate to serve the area being platted.

77-21 Water Distribution System. All distribution systems shall include all water pipes of a diameter needed to supply sufficient pressure and volume for fire protection and provide adequate service to each lot.

77-22 Individual Wells. Where large lots are served by individual wells, a separate well shall be provided for each lot. Each well so provided shall meet the approval of the County Engineer and the County Health Department.

78 GUARANTEE OF IMPROVEMENTS

78-10 Completion of Improvements. No final subdivision plat shall be approved by the Planning Commission or accepted for recording by the County Register of Deeds until all required improvements have been constructed in a satisfactory manner except as hereinafter provided.

78-20 Bond in Lieu of Completion of Improvements. In lieu of completion of required improvements the Planning Commission may approve a final subdivision plat provided sufficient security is posted with the City of Knoxville Law Department

for subdivisions within the City of Knoxville, or the Knox County Board of Commissioners for subdivisions within the unincorporated area of Knox County, as will insure the construction of the required improvements within two years from the date of approval of the final plat. This security may be in the form of a performance or surety bond, guaranteed by a bonding company licensed to do business in the State of Tennessee, a cash deposit to be held in escrow by the appropriate city or county agency, or an irrevocable letter of credit securing the appropriate city or county agency. All such forms of security shall be in an amount not less than one hundred (100) percent of the estimated cost of the improvements as determined by the appropriate agency designated by the Knox County Board of Commissioners or the Mayor of the City of Knoxville, as applicable.

78-20.1 A separate bond or other security shall be posted for drainage systems and street improvements. An expiration date shall be clearly stated in all securities.

78-20.2 The drainage bond or other security shall be posted for a period of not more than one (1) year but may be released at any time upon certification by the appropriate agency that the drainage system is complete and fully stabilized, or upon acceptance of a new bond or other security as provided in 78-40.

78-20.3 The street improvement bond or other security shall be posted for a period of not less than three (3) months or more than one (1) year, but may be released at any time upon certification by the appropriate agency that all improvements have been completed and all standards and specifications have been met, or upon acceptance of a new bond or other security as provided for in 78-40.

78-20.4 The Planning Commission shall be notified in writing by the appropriate agency of all bonds or other securities accepted. Such notice shall state name of subdivision including unit number, type of security, date accepted and expiration date.

78-30 Execution of Bonds. If all required improvements have not been completed and certified by the appropriate agency by date of expiration, the bond or other security shall be executed.

78-30.1 Written notice of intent to execute shall be given by the appropriate agency not less than thirty (30) days prior to expiration date.

78-30.2 Upon execution of a bond or other security the appropriate agency shall arrange for completion of improvements. Proceeds of the bond or other security shall be used to defray all costs of completion.

78-40 Acceptance of New Bond in Lieu of Execution. Upon written request, a new bond or other security may be accepted in lieu of execution of an outstanding security. Such requests must be filed and the new bond or other security posted with appropriate city or county official not less than fifteen (15) days prior to expiration of outstanding security.

78-40.1 Such bond or other security shall not exceed a period of one year and shall be in an amount not less than one hundred (100) percent of the estimated cost of completion of improvements.

78-40.2 If such new bond or other security is accepted, the outstanding security shall be released.

SECTION 8

GENERAL PROVISIONS

81 AREA OF JURISDICTION

The Knoxville and Knox County Metropolitan Planning Commission, through these subdivision regulations, shall have jurisdiction and control over the subdivision of all land in Knox County, Tennessee, including the incorporated City of Knoxville which area shall also be considered as the planning area, but excluding all land located within the corporate boundaries of the Town of Farragut.

82 VARIANCES

These land subdivision regulations are adopted only as minimum requirements, and all developers should consider developing their subdivisions at higher standards. Thus, the developer is encouraged to go beyond the standards of these regulations and the Planning Commission may require standards above the minimum contained herein upon finding that the public health, safety, and welfare justify such standards.

The Planning Commission also may reduce or otherwise vary the requirements of these regulations whenever it encounters the situation described below. In granting such variances, the Planning Commission may attach and require whatever conditions it feels are necessary to secure the basic objectives of the varied regulations. Any variance granted by the Planning Commission shall be noted in its official minutes along with the reasons which justified the granting of the variance.

82-10 Hardships. The Planning Commission may reduce or otherwise vary the requirements of these regulations when a definite hardship would occur as a result of strict enforcement of these regulations.

82-11 Conditions Required. Where the Planning Commission finds that extraordinary hardships or particular difficulties may result from the strict compliance with these regulations, they may, after written application by the developer, grant variations to the regulations, subject to specified conditions, so that substantial justice may be done and the public interest secured, provided that such variations shall not have the effect of nullifying the intent and purpose of these regulations or the comprehensive plan.

82-12 Evidence of Hardship Required. The Planning Commission shall not grant variations to these regulations unless they make findings based upon the evidence presented to them in each specific case that:

82-12.1 Because of the particular surroundings, shape, or topographical conditions of the specific property involved, a particular hardship to the owner would result, as distinguished from a mere inconvenience, if the strict letter of the regulations were adhered to.

82-12.2 The conditions upon which the request for a variation is based is unique to the property for which the variation is sought and is not applicable,

generally, to other property, and has not been created by any person having an interest in the property.

82-12.3 The purpose of the variation is not based exclusively upon a desire for financial gain.

82-12.4 The granting of the variation will not be detrimental to the public safety, health, or welfare, or injurious to other property or improvements in the neighborhood in which the property is located.

83 AMENDMENTS

The Planning Commission may from time to time revise or modify or amend these regulations by appropriate action taken at a regularly scheduled meeting after the required notice and holding of a public hearing.

An amendment becomes effective when the Metropolitan Planning Commission approves it. The amendment is forwarded to the city and county as a matter of practice.

The Planning Commission's Secretary is empowered and authorized by the Planning Commission to correct and amend these regulations as to the following non-substantive matters, without public notice or public hearing: spelling; change in case and punctuation; references to sections of the Tennessee Code Annotated to conform with amendments thereto; the enumeration of these regulations so as to provide consistency and clarity; names and titles of organizations and individuals referenced in these regulations, to conform with incumbent names and titles.

84 ENFORCEMENT AND PENALTIES FOR VIOLATIONS

The enforcement of these regulations and penalties for the unapproved recording or transfer of land is provided by state law in the authority granted by public acts of the State of Tennessee.

84-10 Enforcement. The following procedures are provided in the *Tennessee Code, Annotated* for the enforcement of subdivision regulations.

84-11 Recording. No plat or plan of a subdivision of land into two (2) or more lots, tracts or parcels, any of which are less than five (5) acres in size, located within the area of planning jurisdiction shall be admitted to the land records of the 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 13-3-402 of the *Tennessee Code, Annotated*.

84-12 Acceptance of Streets and Utilities. No board, public officer, or authority shall light any street, lay or authorize the laying of water mains or sewers, or authorize the construction of other facilities or utilities in any street located within the area of planning jurisdiction unless such street shall have been accepted, opened, or otherwise received the legal status of a public street in its location and lines to a street shown on a subdivision plan or plat approved by the Planning Commission, or on a street plan made and adopted by the Planning Commission as provided in Section 13-3-406 of the *Tennessee Code, Annotated*.

84-20 Penalties. For violation of these regulations, the following penalties are provided by the *Tennessee Code, Annotated*:

84-21 Recording. 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 of the *Tennessee Code, Annotated*; and any county registrar so doing shall be deemed guilty of a misdemeanor, punishable as other misdemeanors as provided by law.

84-22 Transfer or Sale of Land. Section 13-3-410 of the *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 subdivision to the Planning Commission and obtained its approval as required before such plat is recorded in the office of the appropriate county registrar, shall be deemed guilty of a misdemeanor, punishable as other misdemeanors as provided by law; and the description 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 county, through its county attorney, the city through its attorney, or other official designated by the appropriate legislative body, may enjoin such transfer or sale or agreement by action or injunction.

84-23 Erection of Structures.

84.23.1 Structures in Knox County. 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 Director of Code Administration and Inspection or the county attorney or other official designated by the Board of County Commissioners may bring action to enjoin such erection or cause it to be vacated or removed as provided in Section 13-3-411 of the *Tennessee Code, Annotated*.

84.23.2 Structures in City of Knoxville. 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 city building inspector, or the city attorney or other official designated by the city council acting within the corporate limits of the City of Knoxville may bring action to enjoin such erection or cause it to be vacated or removed as provided in Section 13-3-411 of the *Tennessee Code, Annotated*.

85 SEPARABILITY

Should any section, subsection, paragraph, or provision of these regulations be held invalid or unenforceable by a court of competent jurisdiction, such decision shall in no way affect the validity of any other provision of these regulations, it being the intention of the Planning Commission to adopt each and every provision of these regulations separately.

86 REPEALER

All ordinances, parts of ordinances, rules, and regulations in conflict with the provisions of these regulations are hereby repealed; except that all plats having preliminary approval prior to the adoption of these regulations for a period of eighteen (18) months. At the end of that period all preliminary approvals granted prior to the date of the adoption of these regulations shall be canceled.

87 PUBLIC HEARING AND EFFECTIVE DATE

87-10 Public Hearing. Before adoption of these subdivision regulations, a public hearing as required by Section 13-3-403 of the *Tennessee Code, Annotated*, was offered to any interested person or persons and was held on June 10, 1971. Notice of said hearing was announced in the Knoxville News-Sentinel, being a daily newspaper of general circulation within the area of planning jurisdiction, on May 8, 1971, and stating the time and place of the hearing.

87-20 Effective Date. These regulations shall be in full force and effect from and after their adoption by the Metropolitan Planning Commission of Knoxville and Knox County, Tennessee:

Adopted this 8th day of July 1971 by the Metropolitan Planning Commission of Knoxville and Knox County, Tennessee.

By _____
Chairman

APPENDIX A

AMENDMENTS TO MINIMUM SUBDIVISION REGULATIONS FOR KNOXVILLE AND KNOX COUNTY (July 31, 1992 to Present¹)

May 14, 1992: Section 54-42.5 - Certification of Class and Accuracy of Survey

Certification stamp updated to reflect amended Board of Surveyors licensing requirements.

February 11, 1993: Section 44-22 – Incomplete Final Plats

Amendment changes the deadline for submission of completed final plats.

June 10, 1993: Section 64-24 – Access

Under this amendment, joint permanent easement approval would no longer require a variance if certain location, construction and maintenance standards are met.

December 8, 1994:

Section 22 – Definitions

This amendment deleted the definition of “Composite Design Plan”.

Section 32-25 – Composite Design Plan Approval

This amendment eliminated the composite design plan from the design plan review process and clarified the design plan approval requirements for Final Plats.

Section 43-60 – Composite Design Plan

This section was deleted to eliminate the composite design plan submission requirement.

Section 44-70 – Copy to be Recorded/Official Copy

This amendment changed the required material for the recordable copy of Final Plats from clothback to mylar.

Section 52-10

These amendments allow the MPC staff to administratively accept four-foot contour intervals and smaller scales on concept plans under certain circumstances.

Section 53-13 – Permanent Reference Markers, Monuments, and Benchmarks

This amendment clarified monumentation requirements for design plans.

Section 52-20 – Digital Media

This new section allows for the submission of Concept Plans on digital media which is compatible with the KGIS system.

Section 53-30 – Composite Design Plan; Section 53-31 – Acceptance

These sections were deleted to remove references to composite design plans, which are no longer required.

Section 54-10 – Plat

¹ All references to Section 5 are now found in Section 4

This amendment deleted references to the composite design plan in the description of the final plat.

Section 54-17 – Copy to be Recorded – Reproducible Official Copy

This amendment changed the required material for final plats from clothback to mylar.

Section 54-18 – Survey Accuracy

This new section requires all surveys to conform to the *Tennessee Land Surveyors Laws and Regulations*, and requires surveys to be of Category I accuracy.

Section 54-19 – Digital Media

This new section allows for the submission of Final Plats on digital media which is compatible with the KGIS system.

Section 54-22 – Monument References and Survey Control Requirements

This amendment clarified monumentation requirements for Final Plats.

Section 54-45.7 – City – Release of Easements

This amendment separated the easement release endorsements of the gas and electric departments of KUB.

Section 74-10 – Permanent Reference Markers and Monuments

This amendment clarified the improvements necessary for monumentation.

June 6, 1996: Section 36-11 – Public Hearing on Appeal

This amendment deletes specific time references as to when a public hearing must be held.

August 13, 1996:

Section 22 – Definitions

This amendment clarifies and adds definitions to be consistent with definitions, standards, and other related provisions included in the 1996 *Major Road Plan*.

Section 62 – Streets and Roads

This amendment makes the design standards consistent with definitions, standards, and other related provisions included in the 1996 *Major Road Plan*.

Section 72 – Street and Road Improvements

This amendment makes the design standards consistent with definitions, standards, and other related provisions included in the 1996 *Major Road Plan*.

April 10, 1997: Section 44 and 54 – Final Plat

This amendment requires the submission of digital survey information with Final Plats. Plats must conform to the standards of the Technical Appendix for Digital Surveys, which is administered by the MPC staff.

April 8, 1999: Section 54 – Final Plat

This amendment temporarily suspends the requirement for submitting digital versions of final subdivision plats, and adds a requirement for boundary closure information. (Refer to Sections 42 and 44)

October 12, 2000:

Section 62-37 – Alleys

Under this amendment, the Planning Commission may approve the use of alleys as the sole means of vehicular access.

Section 64-24 – Access

This amendment requires frontage or easement for those lots approved with an alley as the sole means of vehicular access.

July 12, 2001:

Section 1 - 11 – General Purpose

This amendment makes the general purpose of the subdivision regulations consistent with the general purpose described in the state enabling legislation.

Section 3 – 36 and Section 4- 44

This amendment removes references to appeals to County Commission and makes regulations consistent with the State law.

November 8, 2001:

Amendments dealing with requirements for determining review of a proposed subdivision as an exempt, one-lot, minor, concept plan or corrected plat; access to proposed lots by means of either public rights-of-way, permanent easements, or joint permanent easements, criteria for determining when the balance of a subdivided parcel must be included on the plat; and other related sections.

Section 4 – Procedure for Submission of Plat and Section 5 –Specifications for Plans and Plats were Combined to Form One New Section, Section 4 – Procedures and Specifications for Submission of Plans and Plats

Section 42–20 When Concept Plans are Required

This section amended by deleting requirement of a Concept Plan for all subdivisions served by a new joint permanent easement.

Section 45-31.2

This section revised to clarify title and conditions that may warrant submission of a Concept Plan.

Section 64-24.3

This section clarified to give specific reference to city and county ordinances and policies that regulate driveway width, surface material, and to add provision on determining when a lot is served by an exclusive permanent easement.

Section 64-24.41

The provision identifying when a lot is served by a joint permanent easement has been moved to this section, eliminating sections 64-24.7 and 64-24.8.

August 12, 2004

Housekeeping changes were made to names of city or county departments and agencies, citations to the *Tennessee Code, Annotated*, numbering, and wording previously adopted but omitted from the existing copy of the Regulations.

Section 2 - Definitions

Added a definition for KGIS. The Knoxville, Knox County, Knoxville Utilities Board Geographic Information System.

Section 44-20, 44-89, 44-90 – Submission of Final Plat

This amendment deleted the reference to the Technical Appendix for Digital Surveys.

Section 44-22 – Incomplete Final Plats

This amendment waives the 9-day deadline with just cause for an incomplete final plat if it is presented to the Planning Commission at a scheduled meeting.

Section 44-101 – Subdivision Name

This amendment requires that a subdivision divided by an expressway, major or minor arterial street, or major or minor collector street must have a different name for the subdivision located on each side of said street. It also requires that each unit of a subdivision with the same name must be connected by interior streets.

Section 44-111 through 44-115.10 – Certifications

All certification stamps were updated. New engineering certifications required for Concept Plans. A new certification for street/road names required by the MPC Addressing Department. New certification from the Knoxville Engineering Division required for final plats.

Section 62-30 – Classification of Streets and Roads

Street classifications were changed to agree with the 2004 *Major Road Plan*, adopted July 8, 2004.

Section 62-60 through 62-85 – Grades of Streets

This amendment revised the minimum grade of streets and the radii of property lines and curbs.

Section 62-91 – Street Names

This section was amended to agree with the wording in *The Uniform Street Naming and Addressing System Ordinance*, adopted by Knox County (O-91-102) and the City of Knoxville (O-80-90)

Section 64-24.63 – Joint Permanent Easement

This amendment changed the wording from “lot” to “dwelling units or buildings in non-residential developments”.

Section 83 – Amendments

This amendment gave approval for MPC staff to correct and amend the Subdivision Regulations as to non-substantive matters without public notice or public hearing

June 8, 2006

Section 44- Final Plat

Sections 44-70.01, 44-82 and 44-87 dealing with the required copies for plat certification.

November 9, 2006

Section 43-65 Non-Residential Designations and **Section 64-24.49** amending terms such as “single-family” and “multi-family” descriptions of dwelling units, replacing them with “houses” and “multi-dwelling structures” as amended in the Zoning Ordinances.

February 27, 2007

Section 2-22 Definitions amending terms “Right-of-Way” and “Street”.

Adding new **Sections 62-39, 62.43, 62-56, 62-89, 63-11, and 63-21** reflecting the streetscape design standards contained in the Knoxville South Waterfront Form Based Development Code.

March 13, 2008

Section 36 Appeals and following sections deleting all reference to appeals being heard by MPC adding that appeals shall be to any Court of competent jurisdiction (**42-60, 43-40, 43-50, 44-60.**)

July 8, 2010

Sections 44 and 46 regarding review agencies and the number and type of copies of a final or administrative plat to be submitted for review, certification for recording and recording (**44-20, 44-70, 44-80, 46-31** and new section **46-60**)

October 13, 2011

Amended **Section 44-82** regarding scale of drawings and **Section 44-83** regarding the size of sheet allowed for submittal of a final plat. (10-C-11-OA)

June 14, 2012

Amended **Sections 61, 67, 67-40, 67-41, 69** (in its entirety), and **82** regarding development standards for subdivisions within the Hillside and Ridgetop Protection Areas. (4-B-12-OA) (City adopted Ord. # O-120-2012 on 7/24/2012; County withdrew O-12-8-101 on 8/27/2012)

APPENDIX B

TRAFFIC ACCESS AND IMPACT STUDY GUIDELINES AND PROCEDURES²

September 26, 2000: Article VII Traffic Access and Impact Study Submission Requirements

Section 1 – Purpose for Submission of Traffic Access and Impact Studies

These traffic access and impact study guidelines and procedures define when proposed concept subdivision plans, uses-on-review, or development plans warrant a detailed traffic study and what information should be included in it. All applicants will be required to follow the MPC guidelines and will be treated equally under the same or similar circumstances.

The purpose of performing a traffic impact and access study, as defined by the Institute of Traffic Engineers (ITE), is to:

1. Provide guidance for short and long-range planning of site access;
2. Provide guidance for on-site circulation and the interface between on-site circulation and off-site traffic;
3. Provide guidance for off-site improvements needed to permit the roadway system to function satisfactorily so as to accommodate site and non-site traffic;
4. Assist developers and landowners in making land use site planning decisions regarding traffic;
5. Identify the contribution a particular development makes to roadway system traffic volumes;
6. Provide a basis for estimating roadway improvement requirements attributable to a particular project;
7. Assess the compatibility with local transportation plans;
8. Enable staff to better evaluate zoning changes and development plans;
9. Allow appointed and elected officials to know implications of their voting decisions.

² Appendix B, Adopted September 26, 2000, from the *Knoxville/Knox County Metropolitan Planning Commission Administrative Rules and Procedures*.

Section 2 – Scope of Required Traffic Access and Impact Studies

Three levels of study have been identified based on the number of trips that a development is projected to generate in a 24-hour period:

Level I studies require analysis of each access that the development has to an existing roadway. Access points to be analyzed include public roads, joint permanent easements, and private driveways. This level of study is commonly required for large residential subdivisions, office developments, and smaller commercial developments.

Level II studies require analysis of each access that the development has to an existing roadway and to the first control point beyond those access points. A control point is an intersection controlled by a traffic signal or stop sign on the existing roadway onto which the development has access. For cases where a traffic control device does not exist, MPC staff will determine the extent of the study. If a freeway interchange is near the property to be developed and is not signalized, MPC staff will determine if the ramps need to be included in the study. This level of study is commonly required for moderately sized commercial developments and larger office complexes.

Level III studies require a complete traffic access and impact study addressing each access point, the first control point beyond each access point, and the nearest collector/collector intersection or street of higher classification as determined by MPC staff. The exact area to be studied will be determined by MPC with input from the study preparer. Level III studies are uncommon, as they are usually warranted only with very large mixed-use and commercial developments.

Section 3 – When Traffic Access and Impact Studies are Required

Traffic access and impact studies shall be submitted along with applications for concept subdivision plan, use-on-review, and development plan requests which fall within the following 24-hour trip generation ranges:

24-Hour Trip Generation	Traffic Study Scope
750 – 3000 ADT	Level I
3000 – 6000 ADT	Level II
>6000 ADT	Level III

Upon being provided proof by the developer's traffic engineer that a lower level traffic impact study would be adequate for a proposed development, or that a traffic impact study is not warranted, the Executive Director of the Planning Commission staff may reduce the level of study required or waive the requirement.

Section 4 – Submission and Review Procedures for Traffic Access and Impact Studies

1. Applicants should conduct a preliminary trip generation assessment of any proposed concept subdivision plan, use-on-review, or development plan to determine if a traffic study will be required. **This preliminary assessment should be conducted well in advance of the actual submission of plans.**

2. If the preliminary assessment indicates that a traffic study will be required, the applicant should immediately consult with MPC staff to verify a development's projected trip generation, and to confirm whether or not a study will be required. If a study is required, the required level can be determined at that time.
3. The applicant shall then select a traffic or transportation engineer to prepare the study, who may need to consult with MPC staff periodically to review the collected data and any assumptions made in the draft report.
4. Ten copies of the completed draft traffic study shall be submitted along with the development application and all other materials required for submission.
5. MPC staff, along with local and state government, shall review the draft traffic study in conjunction with the other elements of the development application. If the draft traffic study is not of the proper scope or is executed improperly, the applicant shall be notified of the deficiencies and be required to submit corrections on the same schedule that applies to the other elements of the development application. Failure to submit corrections in a timely fashion may lead to postponement of the application until the next regularly scheduled MPC meeting.

Note: Since a completed traffic study must be submitted at the same time as the application for a development, it is critical that the applicant conduct steps 1 – 3 early in their planning of a proposed development. Failure to submit a traffic study, or submission of an inadequate study, is likely to slow the review process and may lead to postponements.

Section 5 – Required Qualifications for Preparers of Traffic Access and Impact Studies

Traffic access and impact studies shall be prepared under the supervision of a qualified engineer who has specific training in traffic and transportation engineering and several years of experience related to preparing traffic studies for existing or proposed developments. The study shall be signed and sealed by the supervising engineer. The ability to forecast and analyze traffic needs for both developments and roadway systems is essential. All traffic operations and design work shall be completed under the supervision of a registered professional engineer.

Section 6 – Required Specifications for Traffic Access and Impact Studies – Report Requirements – Level I and II Studies

I. Introduction

- A. Description of site including a location map
- B. Type of project
 1. If residential, number and type of dwelling units
 2. If commercial or industrial, square footage and type of development
- C. Other planning data which may be pertinent
- D. Map of project with proposed access points shown

II. Existing Conditions

- A. Directional traffic counts on roads adjacent to property with access to development
 1. Traffic counts should be not more than one year old

- B. Level of service of intersection(s) (if applicable)
 - 1. Highway capacity software is recommended
 - 2. Other nationally recognized software can be used

III. Trip Generation Rates

- A. Listing of trip generation rates
- B. Listing of sources for rates used
 - 1. ITE 5th Edition of Trip Generation manual or latest edition
 - 2. If the type of proposed development is not addressed in the ITE manual, then other rates may be used as long as they are documented and have been approved by MPC staff
- C. Calculation of trip ends by type of generator
 - 1. Traffic generated by phase
 - 2. 100 percent occupancy and development

IV. Trip Distribution

- A. Assumptions as to the directional distribution of traffic to and from the development
- B. Assumptions as to the peak hour percentages
- C. Assumptions as to the peak hour directional splits
- D. Assumptions as to the pass-by trips if applicable – must be approved by MPC staff

V. Analysis

- A. Level of Service (LOS) and capacity analysis for peak periods
 - 1. Compute the projected LOS and capacity analysis for each access point to the adjacent road system based on the development by phase
 - a. Highway Capacity Software is recommended
 - b. Other nationally recognized software can be used
 - 2. Compare LOS before development to LOS after development, if applicable
 - 3. Link Analysis, if applicable
- B. Intersection and roadway geometry – existing and proposed
 - 1. Distances from existing streets, driveways, and/or median cut
 - 2. Alignment with existing streets, driveways, and/or median cuts
 - 3. Intersection layout
 - 4. Sight distance
 - 5. Right-of-way width
 - 6. Lane width(s)
- C. Site Circulation
- D. Pedestrian facilities
 - 1. Sidewalks
 - 2. Transit stop(s)
 - 3. School bus stops

VI. Recommendations

- A. Site access
- B. Intersection improvements
 - 1. Traffic control device(s) – modify existing or need for new
 - 2. Left and/or right turn lanes
 - 3. Acceleration and/or deceleration lanes
 - 4. Length of storage bays
- C. Off-site improvements
 - 1. Modification to existing traffic control device(s)

2. Additional traffic control device(s)
 3. Additional lanes at major intersections
 4. Additional roads
- D. Improvements by phasing (if applicable)

VII. Appendix

- A. Raw traffic count data
- B. Documentation of analysis

Report Requirements – Level III Studies

In addition to the preceding information required for Level I and II studies, the following information on Trip Assignment shall be provided in the report prior to the Analysis and Recommendation sections:

V. Trip Assignment

- A. Show existing ADT's, the proposed development traffic, and the total traffic for all affected links on map which identifies the project and the surrounding roads
- B. Show AM and PM peak hour turning movements for the existing traffic, the proposed development traffic, and the combined traffic at all project entrance intersections, and affected intersections within the study area
- C. Discuss the effects of phasing of the proposed project

Section 7 – Additional Technical Information on Traffic Access and Impact Studies

Additional information on Traffic Access and Impact Studies can be obtained from *Traffic Access and Impact Studies for Site Development – A Recommended Practice* by the Institute of Transportation Engineers