Chapter 54 SUBDIVISIONS

Article I. In General

Sec. 54-1. Definitions.

Sec. 54-2. Developer to obtain copy of rules.

Sec. 54-3. Extension of chapter within the extra territorial jurisdiction.

Sec. 54-4. Enjoinment of violation.

Secs. 54-5 – 54-40. Reserved.

Article II. Plats and Plans

Sec. 54-41. Required.

Sec. 54-42. Land situated within the corporate limits or within extra territorial jurisdiction area.

Sec. 54-43. Submission.

Sec. 54-44. Preliminary plat generally.

Sec. 54-45. Final plat generally.

Sec. 54-46. Final plat for recording not to show construction features.

Sec. 54-47. Approval or disapproval of plat.

Sec. 54-48. Municipal services not to be furnished until final plat approved and recorded.

Sec. 54-49. Construction plans.

Sec. 54-50. As built drawings.

Sec. 54-51. Development of subdivision in sections.

Sec. 54-52. Bond or letter of credit.

Sec. 54.53 Street Easements and Drainage Requirements for Culverts and Driveway installation

Secs. 54-54 – 54-80. Reserved.

Article III. Regulations

Sec. 54-81. General arrangement of streets.

Sec. 54-82. Right of way widths of streets and alleys.

Se c. 54-83. Utility easements.

Sec. 54-84. Side lines, size and cut offs for lots.

Sec. 54-85. Minimum drainage criteria.

Sec. 54-86. Minimum specifications for streets and utilities.

Sec. 54-87. Streetlights.

Sec. 54-88. House numbers.

Sec. 54-89. Council' s decisions are final

ARTICLE I. IN GENERAL

Sec. 54-1. Definitions.

The following words, terms, and phrases, when used in this chapter, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

**Plat** means a plat or re-plat.

**Subdivision** means the division of a parcel of land into two or more lots or parcels for the purpose of transfer of ownership or development. The term includes re-subdivision and when appropriate to the context shall relate to the process of subdividing or to the land subdivided.

Adopted 1-19-1999 §25-0

**TxDOT, TxDOT item and TxDOT** specifications mean the 1993 edition of "Standard Specifications for Construction of Highways, Streets and Bridges" by the Texas Department of Transportation, or a more current version of the same publication.

Adopted 1-19-1999 §25-1

Sec. 54-2. Developer to obtain copy of rules.

(a) All persons desiring to subdivide or re-subdivide a tract of land within the city limits or within a distance of one-half mile from the city limits shall first procure from the city a copy of the rules regulating the subdivision or re-subdivision of property.

(b) Before a plat can be submitted, the developer/ owner shall obtain from the county clerk's office information concerning previously filed plats of the property. If existing plats have been filed, the plat must be vacated according to V.T.C.A., Local Government Code § 212.013 before a new or revised plat can be submitted.

Sec. 54-3. Extension of chapter within the extraterritorial jurisdiction.

The provisions of this chapter governing plats and subdivision of land shall be extended to all of the area under the extraterritorial jurisdiction of the city, as authorized by V.T.C .A., Local Government Code § 212.001 et seq .

Adopted 1-19-1999 §25-2

Sec. 54-4. Enjoinment of violation.

Any violation of this chapter outside of the corporate limits of the city but within its extra territorial jurisdiction shall not constitute a crime. but the city may institute such actions in the district court of the county as is necessary to enjoin such violation and to seek other appropriate injunctive relief.

Adopted 1-19-1999 §25.24

Secs. 54-5 -54-40. Reserved.

ARTICLE II. PLATS AND PLANS

Sec. 54-41. Required.

Every owner of any tract of land situated within the corporate limits of the city or within one half mile of the corporate limits who may divide the tract into two or more parts for the purpose of laying out any subdivision of any tract of land or any addition to the city, or for laying out suburban lots or building lots, or any lots, and streets, alleys or parks or other portions intended for public use, or the use of purchasers or owners of lots fronting or adjacent to such lots, shall cause a plat to be made by a licensed surveyor. Such plat shall accurately describe all of the subdivision or addition by metes and bounds and locate them with respect to any original corner of the original survey of which it is a part giving the dimensions of the subdivision or addition, and dimensions of all streets, alleys, squares, parks or other portions intended to be dedicated to public uses or for the use of purchasers or owners of lot s fronting on or adjacent to the subdivision . The plat shall be submitted to the commission for recommendation to the city council for approval or disapproval in accordance with this chapter and with V.T.C.A., Local Government Code § 212.001 et seq.

Adopted 1-19-1999 §25-4

Sec. 54-42. Land situated within the corporate limits or within extraterritorial jurisdiction area.

Any plat or replat of land which is situated within either the corporate limits or within one half mile of the corporate limits of the city shall conform to the general plan of the city and its streets, alleys, parks, playgrounds and public facilities, including those which have been or may be laid out, and to the general plan for the extension of the city and of its roads, streets and public highways, as set forth in this chapter and in other ordinances of the city. If the plat or re-plat shall conform to this chapter and other applicable ordinances and statutes governing plats and subdivisions of land as enacted by the state legislature and the city council to promote the health, safety, morals, or general welfare and to the safe, orderly, and helpful development of the community, the planning and zoning commission shall endorse its recommendation; and the city council shall endorse its approval upon the plan, plat, or re-plat submitted to it.

Adopted 1-19-1999 §25-4

Sec. 54-43. Submission.

(a) Any property owner desiring to subdivide or re-subdivide a tract of land shall submit five copies of the plat along with a letter requesting approval of the plat to the city for review and recommendation to the planning and zoning commission. Within 30 days of the receipt of the filing letter and copies of the plat by the city, the planning and zoning commission shall act upon the plat for their recommendation to the city council.

(b) In order to have the plat approved or disapproved by the planning and zoning commission at it’s regularly scheduled monthly meeting, the filing letter and plat s h all be submitted to the city engineer no less than 14 days prior to the regularly scheduled monthly meeting of the planning and zoning commission. The preliminary plat and construction plans may be submitted together for consideration of the planning and zoning commission in accordance with this section.

(c) All construction required under provisions of this chapter shall be the sole responsibility of the developer, including but not limited to water and sewer service, storm drainage, fire protection, grading, streets, etc.

Adopted 1-19-1999 §25-5

Sec. 54-44. Preliminary plat generally.

(a) Any person desiring to subdivide or re-subdivide a tract of land within the city or within a distance of one-half mile from the city limits shall file with the city five copies of a preliminary plat. This preliminary plat shall be drawn on a scale of 200 feet to the inch or larger and shall show the following:

(1) The title or name under which the proposed subdivision is to be recorded, with the name of the owner of the land shown on the plat. The name or title of the subdivision shall not duplicate or be similar to the name of an existing subdivision or property.

(2) The meridian or north point, the scale of the map, and a location ma p.

(3) The outline of the tract proposed to be subdivided.

(4) The location of existing streets, roads, alleys, blocks, lots, easements, building lines, parks, watercourses, ravines, bridges, culverts and present structures with principal dimensions, and all significant information in regard to the property immediately adjacent on all sides.

(5) The names or designations of existing streets or roads.

(6) The names or designations of all adjoining subdivisions and properties.

(7) The proposed plat of subdivision or re-subdivision, showing streets, alleys, blocks, lots, easements, building lines, parks, watercourses, ravines, bridges, and culverts with principal dimensions. The plan shall show how the streets, alleys, highways, and easements in the subdivision or re-subdivision and water and sewer lines will connect with those in surrounding subdivisions or properties.

(8) The names of proposed new streets.

(9) The locations of any existing sewer, water, or drainage facilities.

(10) The proposed general plan for street improvements, drainage improvements, and water and sewer improvements.

(11) Contour lines at not more than two-foot intervals.

(12) Location on property of any designated flood hazard area base flood or a certification by the surveyor preparing the plat that the property does not lie within a flood hazard area.

(13) Separate preliminary and final plat filing fees, which are on file, paid by the sub-divider at the time of filing.

(b) The preliminary plat shall remain in effect for one year following approval. If construction plans have not been approved at the end of the one-year period, the preliminary plat must be resubmitted again for approval.

Adopted 1-19-1999 §25-6

Sec. 54-45. Final plat generally.

(a) The sub-divider shall file one sepia or mylar original and five copies of the final plat with the city. This plat shall be made with an accurate survey (1:10,000 or better closure within the city limit s and 1:7,500 or better within the extraterritorial jurisdiction) and shall be neat and in all respects proper for filing for record in the office of the count y clerk. Patching and the pasting of paper attachments is not acceptable. All figures and lettering shall be neat and easily legible. The final plat shall be drawn on a scale of 200 feet to the inch or larger. The final plat shall show the following:

(1) The title or name by which the subdivision is to be identified, the meridian or north point, the scale of the ma p, a location of the ma p, and the name and seal of the surveyor responsible for the surveys and the plat.

(2) A definite legal description and identification of the tract being subdivided or re-subdivided, sufficient for the requirements of the title examination. This may be embodied in the title or shown elsewhere on the plat.

(3) The external boundary of the subdivided property indicated on the map in a distinctive manner with complete and accurate field notes of the boundaries. All corner points, angle points and points of curve along the external boundary of the subdivision as shown on the final plat shall be marked on the ground, and descriptive data as to the type of marker placed shall be included on the plat.

(4) The location and designation of all streets alleys, easements, and other areas, with proper dimensions, within the subdivision intended to be dedicated to the public use.

(5) The location of all adjacent dedicated streets, alleys and easements with their names or designations, and the names of adjoining subdivisions and properties.

(6) All block, lot, and street boundary lines. Blocks and lots shall be numbered. Building lines and easements shall be shown, measured at right angles or radially, where curved.

(7) All necessary dimensions, including linear, sublinear, and angular. The linear and curvilinear dimensions shall be expressed in feet and decimals of a foot and shall be accurate to the hundredths place. The angular dimensions ma y be shown by bearings, and the angles shall be accurate to the second. Curved boundaries must be fully described, and all essential information given, including the length of arcs of curve. Block corners, angle points, points of curve and points of intersection of tangents shall be shown. Complete dimensional data shall be given on fractional lots or tracts.

(8) A certificate of ownership in fee of all the land embraced in the subdivision; of authenticity of the plat and dedication, including all properties intended for public use; signed and acknowledged by all owners of any interest in the form required in the conveyance of real estate. Approval and acceptance by all lienholders shall be included.

(9) A certificate by the responsible surveyor, duly authenticated, that the plat is true and correct in accordance with the determinations of surveys actually made on the ground.

(10) Minimum allowable finished floor elevation on each lot, referenced to USGS datum.

(11) Separate preliminary and final plat filing fees, which are on file, paid by the sub- divider at the time of filing.

(b) The final plat shall include a signed statement by the owner guaranteeing the construction of all required facilities (streets, lines, drainage, etc.), for a period of one year following acceptance of the as built drawings by the city engineer.

 Adopted 1-19-1999 §25-7

Sec. 54-46. Final plat for recording not to show construction features.

The final subdivision plat to be placed on record with the county clerk shall not show construction features such as curb lines or public utility lines or other structures not involved in the title covenant.

Adopted 1-19-1999 §25-12

Sec. 54-47. Approval or disapproval of plat.

(a) The planning and zoning commission shall recommend approval or disapproval of a preliminary plat within 30 days from the filing date, and no improvements nor any contracts shall be made until the preliminary plat has been approved and recorded by the city council.

(b) A final subdivision plat, in its final form, after construction and after the owner's and surveyor's certificate have been signed and executed, shall be transmitted by the city secretary to the planning and zoning commission, with a report in writing, prepared by the city engineer, giving recommendations in the matter. Such plat shall be approved or disapproved by the planning and zoning commission; but no action shall be taken upon such plat until all improvements, water, sewer, drainage, streets, etc., are complete and recommended for acceptance by the city engineer. If the preliminary plat or final plat is approved, the planning and zoning commission shall indicate such approval by certificate endorsed on the plat, signed by the chairman of the planning and zoning commission and the mayor, and attested by the city secretary.

(c) The city council shall keep a record of such application for approval of a plat and the action upon the plat and upon the demand of the owner of any land affected shall certify its reasons for such actions.

Adopted 1-19-1999 §25-13

Sec. 54-48. Municipal services not to be furnished until final plat approved and recorded.

Unless and until the final subdivision plat is approved as provided in this chapter and is recorded by the county clerk, it shall be unlawful within the area covered by the plat for any official of the city to serve or connect the platted land, or any part of the la n d, or for the use of the owner or purchasers of the la n d, or any part of the land, with any public utilities such as water, sewer, light, gas, etc., which may be owned, controlled or distributed by the city. City owned utilities shall not be furnished to any property outside the city limit s without the approval of the city council.

Adopted 1-19-1999 §25-14

Sec. 54-49. Construction plans.

(a) Before the beginning of any construction on the proposed streets, drainage or public utilities pertaining to the subdivision, plans of construction shall be filed with the city. These shall show such features as:

(1) Street cross sections and longitudinal slope;

(2) Drainage structure shape and slope;

(3) Full description of proposed pavement or street improvement dimensions, including specifications;

(4) Complete design and specification data concerning public utilities to be installed, showing the proposed position on the ground, specifications of materials and construction, plan profile views of all sanitary and storm water sewers showing both ground surface and flow line; and

(5) Any other pertinent information. If any part of the proposed construction is considered unsatisfactory by the city engineer and below the standard required under the circumstances, construction operations shall not be started on the affected portion until alterations are made which will ensure that the completed work will conform to the requirements of the city.

(b) The plans submitted shall be on 24 inch by 36 inch sheets, at a scale of one inch equals 20 feet horizontal and one inch equals five feet vertical. Three blue line copies shall be submitted. Calculations to show the design loading for each drainage structure and for water and sewer lines shall be included. The plans shall bear the seal of a professional engineer, licensed to practice in the state in accordance with the Texas Engineering Practice Act.

Adopted 1-19-1999 §25-15

Sec. 54-50. As built drawings.

Upon the completion of construction of any public utility or public improvement in a subdivision, a reproducible copy of complete final plans in detail, dated, signed, and certified by the engineer in charge, shall be filed with the city office, showing all features as actually installed, including materials, size, location, depth of elevation, number, ends of lines, connections, wyes, valves, storm sewer drain s, inlets, etc. Included on such plans shall be the location of at least one permanent benchmark established, with elevation noted, based on data used in design and construction of public improvements with the subdivision. The benchmark shall be adequately described and referenced. Connections with city utilities will not be allowed until such plans have been filed.

Adopted 1-19-1999 § 25-16

Sec. 54-51. Development of subdivision in sections.

The sub-divider may request recommendation from the planning and zoning commission and approval from the city council to develop the subdivision in two or more sections. In order for a subdivision to be developed in sections, the streets, drainage facilities and utility lines within a section must be capable of functioning independently of those facilities in other sections that will be constructed at a later date. The streets within a section must be capable of providing adequate circulation for emergency (police, sheriff, fire, and ambulance) vehicles.

Adopted 1-19-1999 § 25-17

Sec. 54-52. Bond or letter of credit.

If the sub-divider sells any lots prior to final plat approval and elects not to construct streets, drainage facilities and utility lines, (the facilities) prior to construction of buildings, the sub-divider shall furnish a performance bond in an amount equal to an estimated cost of the streets, drainage facilities and utility lines in the entire subdivision or in approved section of the subdivision to ensure that such streets, drainage facilities and utility lines shall be constructed by the sub-divider. If the sub-divider elects not to furnish bonds, the subdivider shall submit to the city an irrevocable letter of credit from a national bank, state bank, or savings and loan association located in the state in an amount equal to an estimated cost of the streets, drainage facilities and utility lines in the entire subdivision or an approved section of the subdivision. The subdivider’s engineer, who has designed the streets, drainage facilities and utility lines, shall estimate the cost of construction for those facilities. This estimated cost shall be approved by the city’s engineer. The subdivider will be required to construct the facilities covered by the bond/letter of credit within a one-year period. If the sub-divider constructs the required facilities in accordance with this chapter prior to the expiration date of the letter of credit and all-other term of this ordinance have been met the letter of credit will be terminated by the city. Sub-divider shall provide a maintenance bond or equivalent letter of credit in accordance with the terms and conditions stated in section B below which has been properly executed and approved by the city. If the sub-divider fails to construct the facilities covered by the letter of credit/bond, the financial institution or bonding company will provide funds to the city in order for those facilities to be constructed.

B. All persons desiring to sub-divide or further sub-divide a tract a tract of land inside the city limits of the City of East tawakoni or its Extra Territorial Jurisdiction shall be required to maintain all improvements proposed to be City maintained in such new subdivision at their own cost and without the cost to the city, for a period of two (2)years. 180 days prior to the expiration of the maintenance bond the Sub – divider shall schedule an inspection at the subdivider’s cost of said improvements with the city’s approved inspectors following the completion of the inspection and the required amount of time has been meet the maintenance bond shall be released.

Adopted 1-19-1999 § 25-18

Amended 3-15-22

Sec. 54-53 Street Easements and Drainage Requirements for Culverts and Driveway installation

The City of East Tawakoni owns and shall not relinquish ownership of the easement adjoining public streets and thoroughfares. However, care and Maintenance of the easement shall be the responsibility of the developer and/or the property owner. All driveways for houses are to built by the developer of any subdivision and any driveways for house or structures of any property owners shall be constructed at the expense of the developer and/or property owner. All culverts shall be installed prior to beginning the construction of any structure on the property. It is required that adequate drainage be provided by using galvanized steel pipe to ensure proper water flaw in the storm water ditches.

If the land shall lay fallow but the owner(s) enter and exit the land, then the owner(s) shall be required to install a culvert for their use.

The developer and/or property owner shall apply for a culvert permit from the City and the following inspections shall be made by a designee of the city authorized to perform such inspections. (1) establish excavation elevations (2) culvert placement (3) rock installation and cover materials (4) final cover material installation. The drainage ditch shall be excavated to the original ditch elevation for a distance of no less than 20 lineal feet. Rock shall fully encapsulate the culvert; such rock shall be 1” – 2” course grade with no more than 20 % crusher fines infiltrated into the material. The culvert shall be constructed of galvanized steel pipe with a minimum thickness of 16 gage and having minimum length of 20 feet. The diameter of the culvert pipe will be established by a designee of the city authorized to perform such inspection based on the ditch elevation and adjoining soil / road elevation. The material used in the construction of driveways between the surfaced area of streets and the boundary lines of the property owners should be of material used for roadway purposes, preferably the same type material of which the adjacent street is constructed. If the property owner is desirous of using different type of material and construction for his driveway other than that used in the construction of the adjacent street, plans should be submitted to the designee of the city authorized to perform such inspections for approval specifically indicating the type of proposed material and construction to be used.

That the maintenance of driveways constructed as outlined in preceding section of this Ordinance shall be at the expense of the property owner(s).

That any person, firm, or individual who shall violate any of the provisions of this ordinance shall be guilty of a misdemeanor and upon conviction shall be fined in any sum not exceeding five hundred dollars ($ 500.00), and each day’s violation shall constitute a separate and distinct offense. If the developer shall be a corporation and shall violate any provisions of this ordinance, the president, vice president, secretary, treasurer of such corporation or manager, agent or employee of such corporation shall be severally liable for the penalties herein provided

Adopted 10-1-2002

Secs. 54-54 -54-80. Reserved.

ARTICLE III. REGULATIONS

Sec. 54-81. General arrangement of streets.

The arrangement of streets in a new subdivision shall make provision for the continuation of the principal existing streets in adjoining areas, or of their extensions where adjoining property is not subdivided, insofar as they may be necessary for public requirements. The street, alley and utility easement arrangements must be such as to provide opportunity for access and use by adjoining property owners. Dead end streets will not be approved; cul-de-sac may be permitted where the shape or contour of the land makes it difficult to plat with connecting streets. Such cul-de-sac

shall provide proper access to all lots and shall not exceed 600 feet in length, except that a greater length may be approved by the city council where conditions justify such lengths. Each such cul-de-sac shall provide a turnaround at the closed end with an outside pavement radius of at least 39 feet.

Adopted 1-19-1999 § 25-8

Sec. 54-82. Right of way widths of streets and alleys.

(a) Arterial or collector streets. The right of way width for arterial streets shall conform to the widths assigned to such arterial streets by action of the city council. In no case shall arterial streets be less than 50 feet in right of way widths. Collector streets shall have a minimum right of way width of 50 feet.

(b) Residential streets. The minimum right of way width for residential streets shall be 50 feet.

(c) Alleys. The minimum right of way width of any alley shall be 20 feet.

double frontage on streets is undesirable. Such double frontage lots shall only be permissible if approved by the planning and zoning commission.

(b) Size generally. Unless otherwise approved by the city council, the minimum size of lots shall be as permitted by chapter 70. Lots should have equal street frontage insofar as possible.

(c) Extra width for corner lots. Corner lots shall have extra width, sufficient to permit the maintenance or adequate building lines on both front and side streets.

(d) Cutoff Lots on major street intersect ions and at all other points likely to be dangerous shall have a 15-foot cutoff at the street corner.

(e) Yards. Minimum yard requirements shall be as outlined in chapter 70.

Adopted 1-19-1999 § 25-9

Sec. 54-83. Utility easements.

Utility easements of sufficient width and proper location shall be provided to permit the construction and maintenance of utilities to serve the subdivision. Where utilities are to be located alongside and/or near lot lines, utility easements shall be a minimum of 7.5 feet in width on each side of the lot line. Where utilities are to be located adjacent to a street right of way, utility easements shall be a minimum of 7.5 feet in width. Easements of greater width than specified in this section may be required where necessary for construction and maintenance of main water lines, main sewer lines, or other main utility lines.

Adopted 1-19-1999 § 25-10

Sec. 54-84. Side lines, size, and cutoffs for lots.

(a) *Side lines*. In all rectangular lots and, so far as possible, all other lots, the side lines shall be at. right angles to the street on which the lot faces or radial to curved street lines. Lots with double frontage on streets are undesirable. Such double frontage lots shall only be permissible if approved by the planning and zoning commission.

(b) *Size generally*. Unless otherwise approved by the city council, the minimum size of lots shall be as permitted by chapter 70. Lots should have equal street frontage insofar as possible.

(c) *Extra width* for corner lots. Corner lots shall have extra width, sufficient to permit the maintenance or adequate building lines on both front and side streets.

(d) *Cutoff*. Lots on major street intersections and at all other points likely to be dangerous shall have a 15-foot cutoff at the street corner.

(e) *Yards*. Minimum yard requirements shall be as outlined in chapter 70".

Adopted 1-19-1999 § 25-11

Sec. 54-85. Minimum drainage criteria.

(a) All drainage shall be designed on a five-year frequency interval for drainage areas less than or equal to 30 acres and on a ten-year frequency interval for areas over 30 acres.

(b) Storm sewers shall be required when the depth of water flowing in the street gutter has reached the top of the curb.

(c) Unless otherwise approved by the building inspector or the city engineer, no house slab elevation shall be placed less than six inches above the top of the street curb directly in front of the house. Where no curb is provided, the slab shall be at least 12 inches above the centerline of the street fronting the property.

(d) Where drainage ditches are required, the design frequency interval will be as outlined in this section. In no case shall the side slopes be greater than 3:1 for grass lined or 1:1 for concrete lined. All lots shall be graded to drain to a city right of way or drainage easement. No lot shall be allowed to drain across another lot.

(e) Any building constructed in a floodplain area shall have its lower floor slab set to conform to HUD regulations and at least one foot above the 100-year flood elevation. No construction, including fill, will be allowed in the floodway, without prior approval of the city council.

(f) All existing drainage ways within the subdivision will be cleared of brush or timber and shaped to conform to the approved drainage plan. Ditches may be grass lined channels, and the developer will be responsible for maintenance until 85 percent coverage is obtained or may be concrete lined. If grass lined channels are used, the design velocity must be less than eight feet per second.

Adopted 1-19-1999 § 25-19

Sec. 54-86. Minimum specifications for streets and utilities.

(a) Submittal to city engineer. Construction plans and specifications for streets and utilities shall be submitted to the city engineer for approval prior to the beginning of construction and shall meet the design requirements of this section.

(b) Residential streets.

(1) Residential street width shall be 27 feet minimum back-to-back of curb or 22 feet paved surface with two-foot shoulders and drainage ditches.

(2) Type shall be reinforced concrete with monolithic curbs or HMAC as described in this subsection.

(a). For reinforced concrete with mono lithic curbs:

1. Thickness shall be 5 ½ inches minimum.

2. Reinforcement shall be #3 rebar. grade 40, at 18-inch center each way or approved equal.

3. Joints shall be sawed 11h inches deep at 20-foot intervals within 24 hours of pouring, expansion at 200-foot intervals.

4. Curb shall be six inches tall with one No. 3 reinforcing bar placed horizontally in the upright portion.

5. Where drive culverts are necessary, they shall be equal to the width of the drive plus at least a minimum of six feet. The diameter must be approved by the city engineer or the city inspector.

6. Materials shall be as follows:

1. Five sack concrete mix.

11. 3,000 psi at 28 days, five inches maximum slump, curbs, and pavement.

111. Air entrained, with three to six percent air.

IV. Apply TxDOT a pp roved curing compound on completion of concrete curbs or pavement.

(b) For HMAC:

(1) Base shall be six inches compacted thickness of crushed rock, meeting TxDOT item 247, type A, grade 1 or 2.

(2) For HMAC, prime base with MC 30; install two-inch compacted thickness hot mix hot laid asphaltic cement meeting TxDOT item 340, type D.

(3) Where drive culverts are necessary, they shall be equal to the width of the drive plus at least a minimum of six feet. The diameter must be approved by the city engineer or the city inspector.

(c) Collectors. Collector streets shall meet the following specifications:

(1) Width shall be 28 feet minimum back-to-back of curb.

(2) The type shall be approved by the planning and zoning commission.

(3) Thickness shall be as follows:

a. Concrete must be seven inches thick. For all other requirements, the same as residential.

b. HMAC must have a minimum compacted crushed rock base thickness of eight inches. For all other requirements, the same as residential.

(d) Arterial. Arterial streets shall be as established by the city council.

(e) Subgrade.

(1) Lime stabilized subgrade is required where the top 12 inches of subgrade has a plasticity index (P.I.) of 15 or greater. If the P.I. falls within a range of 15 to 20, five percent lime is required; if the PI. is greater than 20, six percent lime is required. Install lime in general conformance with TxDOT item 260.

(2) Scarify and re-compact top six inches to 95 percent standard proctor density, at one to five percent above optimum moisture. Extend subgrade 12 inches past back of curb on both sides of the street.

(f) Grade. The minimum centerline grade shall be 0.5 percent. The minimum crown shall be three inches.

(g) Testing. Testing of streets is required by the city engineer and shall be paid for by the developer.

(h) Warranty. The warranty for streets shall be in effect for one year from date of final plat approval by the city.

(i) Utilities. All items incorporated into utilities work shall be new and of a quality equal to or better than specified in this section. The proper spacing distance between water and sewer utilities, as established by the Texas Natural Resource Conservation Commission (TNRCC), must be complied with in the design of the system. In unstable foundation areas, the city may require the use of concrete embedment of the pipe for support. Six inch and larger PVC water piping and all ductile iron piping shall have ductile iron fittings meeting AWWA C 1 10. Water fittings shall be rated for a minimum of 250 psi working pressure and shall be cement lined, with an asphaltic seal coat. Fittings may be mechanical joint fittings or rubber gasket type and shall be blocked with a minimum of three cubic feet of concrete. Concrete must not cover M.J. bolts. PVC sewers shall have PVC fittings. Concrete for encasement, blocking or similar purposes shall be four sack and develop a compressive strength of 2,000 psi at 28 days. Reinforcing steel shall meet Texas Department of Transportation (TxDOT) material standards. There will be a city inspection before covered. Developers guarantee for one full year. If any breaks occur, developers shall repair immediately, or the city will repair and back charge the developer.

(j) Water. When a developer install taps for water service, the connection must extend to the surface of the ground and a three fourths inch corporation stop and concrete meter box and concrete lid must be installed to protect the tap from future construction damage. At such time as a dual connection is made, the developer must install a one-inch corporation stop with a maximum of two three fourths inch meters with concrete box and concrete lid at each extension. The meter boxes must sit on the property in which the service will be utilized and located at the property line.

(1) Type of material. Pipe for potable water service shall be six-inch diameter minimum. Where the city's master plan indicates larger sizes, the city may require the installation of the larger diameter at the city's expense. The pipe shall be PVC, meeting AWWA standard C 900, DR 18, class 150. It shall be cast iron OD., 20-foot lengths, rubber gasket joint, listed by UL and NSF. Six inch and larger to be AWWA C 900, DR 18, PVC, UL and NSF approved.

(2) Size and location.

a. Size and location shall be approved by the city engineer. Maximum loop lengths for lines servicing hydrants shall be 1,750 feet for six-inch water mains and 3,500 feet for eight-inch water mains. No new lines will be approved less than six inches in diameter.

b. Trench bottom for water or sewer shall be smooth and firm, and the pipe shall rest along its entire length on the bottom of the trench. Embedment material shall be native sand or fine granular material. Trench tailings may be utilized provided they have an average diameter of less than one half inch, and are dry, unfrozen, and readily compacted. This embedment shall surround the pipe and extend to a depth of four inches above the top of the pipe. Above this backfill material may be the native soil removed from the trench.

(3) Fire hydrant type and spacing.

a. Fir e hydrants shall be "Mueller" or an approved equal; 800 feet maxi mum spacing between hydrants and to provide a hydrant within 500 feet of the center of all lots. Fire hydrants shall have a six-inch pipe connection, a five-inch valve opening and shall be equipped with auxiliary valves. Auxiliary valve shall be attached to the hydrant with 125-pound standard flanges. Joint for joining the auxiliary valve shall be of the same type as specified for the piping system.

b. All fire hydrants shall meet AWWA C 502 for dry barrel hydrants, 5¼ inch main valve, 150 psi working pressure, with one pumper and two 2½ inch hose connections. Hydrants shall be blocked with class B concrete, and a three cubic foot washed rock sump shall be provided around the weep holes. The hydrants shall have a bury equal to the connection main, and the extensions shall be provided as necessary to provide 18 inches clearance between the nozzle and the ground surface. Each hydrant will have a mechanical joint gate valve installed with an adjustable cast iron valve box.

(4) Testing.

a. Pressure testing shall apply to all water line segments for two hours at 150 psi. The allowable leakage shall not exceed ten gallons per diameter inch mile per day. The line being tested shall be repressurized if the pressure drops below 140 psi, every hour, and at the end of the two-hour period. The amount of water needed to repressurize shall be read from a. totalizing water meter. Tests shall include all service lines to the meter stop.

b. The new water line shall also be sterilized per AWWA C 65 1 86. After construction, the line shall be flush ed and then chlorinated. Bacteriological samples shall be taken after the chlorine residual has reached two ppm. The contractor shall arrange and pay for the testing of the samples at an acceptable laboratory and provide test results to the city.

(5) Compliance. All line sizes and construction must comply with applicable standards of the Texas Natural Resource Conservation Commission (TNRCC), or successor agency. Water pipe shall be buried no less than 36 inches from the finished ground surface to the top of the pipe.

(k) Sanitary sewer. Sewer cleanouts shall be plugged with a screw in plug to prevent inflow. A cast iron cleanout boot will be provided, set in concrete. For sewer services, a one eighth inch bend and wye will be required, installed as the main is laid. Saddles will not be allowed. When a developer installs taps for sewer service the tap must be capped at the end of the service line. The developer must mark the tap for future location by placing the pipe at the end of the cap and extend the pipe not less than 18 inches nor more than 36 inches from the surface of the ground. It will be up to the developer to maintain these markers above ground level until such time that the tap is completed by connecting to the lateral line.

(1) Type of material. The type of material shall be SDR 35 PVC or class 50 ductile iron.

(2) Size and location.

a. Size and location shall be approved by the city engineer (six inch minimum).

b. Pipe for sanitary sewer mains shall be six-inch diameter, and four-inch diameter for service laterals on city right of way. It shall be SDR 35, gasket joint PVC, meeting ASTM D 1784; and gaskets shall meet ASTM F 477. For exposed creek crossings, or sewer with less than 24 inches cover, or for use in bores, sewer pipe shall be encased in smooth schedule 40 steel pipe.

c. Trench bottom, for water or sewer, shall be smooth and firm; and the pipe shall rest along its entire length on the bottom of the trench. Embedment material shall be native sand of fine granular material. Trench tailings ma y be utilized provided they have an average diameter of less than one half inch, and are dry, unfrozen, and readily compacted. This embedment shall surround the pipe and extend to a depth of four inches above the top of the pipe. Above this, backfill material may be the native soil removed from the trench.

(3) Manholes. Manholes shall be circular, constructed over the centerline of the sewer. The minimum clear opening in the concrete cone shall be 23 inches, and the minimum inside diameter of the manhole barrel shall be 48 inches. The manhole shall rest on a 3,500-psi reinforced concrete base; 12 inches larger all around than the outside wall of the manhole. The base shall be eight inches thick, with a mat of #4 reinforcing steel at 12-inch centers both ways. The manhole may be poured in place, in which case it shall be poured of six sack, 3,500 psi, non-reinforced, formed concrete, six inches thick. The manhole may also be precast, meeting ASTM C 478. Joints between the precast sections and any penetrations shall be caulked watertight. Manhole castings shall have recessed pick bars or pick inserts pick holes will not be permissible. The contact surface between the cover and ring shall be machined smooth. The manhole cover will have a 24-inch nominal diameter, and a weight of no less than 300 pounds for ring and cover. Where the manhole is subject to flooding, the cover shall be bolt down, complete with gasket and at least two bolts. The manhole top shall be flush in streets and protrude one inch above the ground in other areas. Where the in com in g and outgo in g sewers in a manhole have a difference in elevations of over 30 inches, a drop structure will be required.

a. Testing. Precast or poured in place concrete is required. Install inflow protector in all covers. No pick holes. Gasket required at pipe penetrations.

b. Spacing. Spacing shall be 500 feet maximum and at all vertical and horizontal bends.

c. Cleanouts. Install manhole or watertight clean outs at dead ends of all mains.

(4) Testing. All sewers shall be air tested in accordance with ASTM C 828 8 0, and tested for deflection by drawing a 95 percent sized mandrel through the line. The engineer for the developer and the city inspector shall observe tests and provide written results to the city.

(5) Compliance.

a. In addition, all line sizes and construction must comply with applicable standards of the Texas Natural Resource Conservation Commission (TNRCC) or successor agency, including 30-day mandrel testing and air testing.

b. Minimum sewer grades shall be no less than specified by the TNRCC regulations. The pipe diameter, grades and appurtenances shall be designed by a registered professional engineer, in accordance with recognized standards. Manholes must be provided at all changes in direction or grade and must be no farther apart than 500 feet. Clean outs or manholes must be provided at the end of each line.

c. Should a lift station appear necessary, the city reserves the right to accept or decline the lift station for operation and maintenance purposes. The design of the lift station, if permitted, must com ply with the TNRCC regulations and must be approved by the city engineer.

(l) Values and vaults.

(1) Valves shall be non-rising stem gate valves with operating nut, designed to take full pressure on either face. All valves shall open by turning to the left. Valves shall operate at a working pressure of 150 psi. Valves up to and including 12 inches in diameter shall be housed in adjustable cast iron valve boxes; valves over 12 inches shall be housed in vaults with internal diameter of 60 inches. Valve vault, sidewall and base construction shall conform to that required in catch basins.

(2) Gate valves shall be mechanical joint were buried and flanged above ground. A gate valve shall be used to isolate each branch line. Gate valves shall comply with A\V\VA specifications, resilient seat, iron body. bronze mounted, designed for 200 psi working pressure. Valves shall have a square operating nut and shall be installed with an adjustable cast iron valve box. PVC pipe will not be acceptable for valve boxes. All M.J. fittings, as well as 45 degree and 90 degrees, and all tees will be blocked with concrete.

(m) Warranty. The warranty for utilities shall be effective for one year from date of final plat approval by the city.

(n) Inspection. Developers will notify the city of dates of construction so the city inspector will be available to inspect construction periodically.

 Adopted 1-19-1999 § 25-20

Sec. 54-87. Streetlights.

The developer of any subdivision at the time of construction of public improvements and/or the developer of any subdivision for which a petition. by the property owner requesting annexation to the city has been filed with the city by or before the time construction of public improvements begins shall make suit able arrangements with the responsible electric utility company to provide adequate electric power service facilities to the location of proposed streetlights. Adequate electric power service is de fined as secondary power service lines from a transformer to the point within the street right of way designated as an approved street light location. The location of the streetlights shall be approved by the planning and zoning commission. Actual installation and operation of streetlight fixtures and appurtenance within the city will be under its working agreements with the electric utility company.

Adopted 1-19-1999 § 25-21

Sec. 54-88. House numbers.

House numbers shall be allocated to lot s in subdivisions by the city. Identification during construction phase is necessary to assist the city inspector, utility companies and city personnel to locate the correct site to perform needed services.

Adopted 1-19-1999 § 25-22

Sec. 54-89. Council's decisions are final.

The city council's decision shall be final in all questions regarding the application of the provisions of this article.

Adopted 1-19-1999 § 25-23