**SUBDIVISION ORDINANCE**

**2021-003**

**Sec. 10.101     Adopted**

These regulations, authorized by chapter 212 of the Texas Local Government Code, shall govern every person, firm, association or corporation owning any tract of land within the city limits of the City of OLD RIVER-WINFREE who may hereafter divide the same into two (2) or more parts for the purpose of laying out any subdivision of any tract of land or any addition to said city, or for laying out suburban lots or building lots, or any lots, streets, alleys, parks or other portions intended for public use, for the use of purchasers or owners of lots fronting thereon or adjacent thereto.

**Sec. 10.102     Definitions**

*Acreage, Net* shall mean the acreage included within the boundary line of a subdivision, tract, parcel, lot, etc., but excluding all public ways.

*Addition* shall mean lots, tracts or parcels of land lying within the corporate boundaries of the city which is intended for the purpose of development.

*Administrative Officers* are every officer referred to by title, i.e., city attorney, city engineer, etc., and shall be the person so retained in this position by the City or his duly authorized representative.

*Agricultural Purposes* - Farming and/or ranching, not residential, commercial or any other use.

*Alley* shall mean a minor way used primarily for vehicular service to the rear or side of properties otherwise abutting on a street and designed for the special accommodation of the property it reaches and not intended for general travel or primary access.

*Applicant* means a developer submitting an application for development.

*Approach Main* is an off-site main which brings water or sewer service to the subdivided property.

*Border Main* is a water or sewer main located in a roadway, alley or utility easement abutting the perimeter of the property of a subdivider.

*Build* means to erect, convert, enlarge, reconstruct, restore or alter a building or structure.

*Building* means any structure designed, used, or intended to be used for human occupancy or use or to support the human occupancy or use of land, including mobile homes.

*Building Line* shall be a line beyond which buildings must be set back from the right-of-way line or property line.

*City or the City* shall mean the City of OLD RIVER-WINFREE, Texas.

*City Council* shall be the duly elected governing body of the City of OLD RIVER-WINFREE, Texas.

*City Engineer* shall be the city engineer of the city, the city’s consulting engineers, or their duly authorized representatives.

*Code* shall mean the City of OLD RIVER-WINFREE Code of Ordinances.

*Commission or Planning and Zoning Commission* shall be the official city planning and zoning commission of the city as appointed by the city council.

*Collector Street* shall be a street which is continuous through several residential or other districts and is intended as a connecting street between such districts and thoroughfares, highways or business districts.

*Commercial Street* shall denote any street situated so that fifty percent (50%) or more of the property abutting it is zoned for other than low-density residential development.

*Commercial Tract* shall mean any tract containing any type of land-use except for single-family detached residential and two-family (duplex) residential uses and agriculture use. (Requirements and standards for religious and educational land-uses shall be the same as the character of the predominant surrounding land-use.) Nothing contained in this definition shall be considered as limitations to or repeal of the definitions set forth in the city’s fire prevention code.

*County or the County* shall mean CHAMBERS County, Texas.

*Cul-De-Sac* shall mean a short residential street having but one vehicular access to another street and terminated by a vehicular turnaround.

*Dead-End Street* shall mean a street, other than a cul-de-sac, with only one (1) outlet.

*Developer* means the legal or beneficial owner or owners of a lot or any land proposed to be included in a proposed development including the holder of an option or contract to purchase, or other person having an enforceable proprietary interest in such land.

*Development* means any manmade change to improved or unimproved real estate, including but not limited to, buildings or other structures, paving, drainage or utilities, but not agricultural activities.

*Development Plat* means a plat reflecting new construction or the enlargement of any exterior dimension of any building, structure, or improvement on property previously final platted or not required to be platted.

*Development Exaction* means any dedication of land or easements for, construction of, or monetary contribution toward construction of a public improvement required as a condition of plat approval by the city under these regulations.

*Easement* shall mean an area for restricted use on private property upon which any public utility shall have the right to remove and keep removed all or part of any buildings, fences, trees, shrubs or other improvements or growths which in any way endanger or interfere with the construction, maintenance or efficiency of its respective systems within said area. Any public utility shall at all times have the right of ingress and egress to and from and upon the said easements for the purpose of constructing, reconstructing, inspecting, patrolling, maintaining and adding to or removing all or part of its respective systems without the necessity, at any time, of procuring the permission of anyone.

*Emergency Access Easement* shall mean a private street, alley or paved place dedicated to the public for the purpose of providing access to adjacent structures by emergency vehicles such as fire equipment, police or ambulances, the boundaries of which are continuously and permanently marked.

*Engineer* whenever used without a prefix, shall refer to a registered professional engineer retained by a subdivider.

*Escrow* means a deposit of cash with the city in accordance with city ordinances.

*Extraterritorial Jurisdiction* means the unincorporated area outside of and contiguous to the corporate boundaries of the city as defined and established in accordance with chapter 42 of the Local Government Code.

*Final Plat* shall refer to a map or drawing prepared according to the provisions of this ordinance, and containing all surveying and legal data, dedications and certificates necessary to the recording of same in the plat records of the county.

*Frontage* means that side of a lot, parcel or tract abutting a street right-of-way and ordinarily regarded as the frontal orientation of the lot.

*HUD-Code Manufactured Home* - A single or multi-section home which requires transport to the site and installation that was built after 1976.

*Lot* shall mean land occupied or to be occupied by a building and/or accessory building and including such open spaces as are required by ordinances of the city and having its principal frontage on a public street or officially approved place.

*Lot Improvement* means any building, structure, work of art or other object or improvements of land on which they are situated, whether immediate or future, which includes streets, alleys, utilities, drainage modifications, access modifications including curb cuts and other similar activities covered by these regulations. Lot improvements include off-site work accomplished for the betterment of removed building lots.

*Lot of Record* shall mean a lot which is part of a subdivision, the plat of which has been recorded with the County Clerk, CHAMBERS County; or a parcel of land, the deed for which was recorded with the County Clerk, CHAMBERS County, prior to November 1961.

*Manufactured Housing* shall indicate any residential structure which is fabricated off-site (in whole or in part) and is assembled on the lot to a permanent foundation. Structures of this type include modular homes, prefabricated homes, or any other structure commonly classified as manufactured housing.

*Master Plan* shall be the comprehensive plan of the city and adjoining areas as adopted by the city council and the city planning and zoning commission, including all its revisions. This plan indicates the general location recommended for various land uses, transportation routes, public and private buildings, streets, parks and other public and private developments and improvements.

*May* means permissive.

*Mayor* shall mean the duly elected presiding officer of the city council of the city.

*Mobile Home* shall refer to moveable structures used primarily for residential purposes any structures driven or towed to a site by the same conveyance. These shall include conventional mobile homes, recreational vehicles, trailer coaches, trailer homes, travel trailers, campers and all similar vehicles.

*Mobile Home Park or Trailer Courts* are areas for renting or leasing sites for mobile homes or trailer coaches.

*On-Site Main* is a water or sewer main located in a roadway, alley or easement within the perimeter of the property of a subdivider and which provides service only within a subdivider’s property.

*Open Space* shall mean that part of any lot or tract that is used for recreational purposes, both passive and active, but not including areas used for parking or maneuvering of automobiles or drives or approaches to and from parking areas.

*Oversize Main* is a water or sewer main which the system’s master plan requires or which the city elects to construct or have constructed of larger diameter than that required to provide service to the property of a subdivider.

*Owner* means an all-inclusive term denoting the person with primary responsibility toward the city to see that these subdivision rules and regulations and the ordinances of the city are complied with. The term includes person, firm, corporation, partnership or agent, attorney-in-fact, manager or, developer. Such term as used in this chapter always includes one (1) or more of the persons enumerated in this section who own all or any part of the land which is contemplated to be developed.

*Planning and Zoning Commission* shall mean the body of seven (7) appointed members charged with the responsibility of reviewing for approval all subdivisions, preliminary plats and final plats in the city.

*Preliminary Plat* shall be a map or drawing on which is shown the subdivider’s proposed arrangement of streets, lots, easements and other public spaces and facilities in the subdivision, and which is intended for review and study by the city, and not for recording.

*Private Road/Street* shall mean any road or street that is not dedicated the city and is maintained by the property owner.

*Replatting* shall be the resubdivision of any part or all of any block or blocks of a previously platted subdivision, addition, lot or tract.

*Residential Tract* shall mean any tract of land developed for the purpose of single-family detached or two-family domestic living (religious and educational institutions may also be included). Requirements and standards for religious and educational institutions shall be the same as the character of the predominant surrounding land-use.

*Residential Street* shall be a street which is intended primarily to serve traffic within a neighborhood or limited residential district which is used primarily for access to abutting properties and which is geometrically designed to discourage high speeds and through traffic.

*Resubdivision* shall mean the division of an existing subdivision, whether platted or unplatted, together with any changes of lot size therein, or with the relocation of any street lines.

*Right-of-Way* means a strip of land occupied or intended to be occupied by a street, crosswalk, railroad, road, electric transmission line, oil or gas pipeline, water main, sanitary or storm sewer main or for another special use. The usage of the term “right-of-way” for land platting purposes means that every right-of-way established as shown on a final plat is to be separate and distinct from the lots or parcels adjoining such right-of-way and not included within the dimensions or areas of such lots or parcels. Right-of-way intended for streets, crosswalks, water mains, sanitary sewers, storm drains or any other use involving maintenance by a public agency shall be dedicated to public use by the maker of the plat on which such right-of-way is established.

*Sanitary Sewer* shall refer to a pipe or conduit for water-carried wastes from residences, business buildings, institutions and industrial establishments, and to which storm, surface and ground water are not normally admitted, and which is a part of the public sewage collection system.

*Service Line* shall refer to a water or sewer pipe running from the water or sewer main to the property to which water or sewer service is given.

*Sewer or Sewer Main* used without any prefix shall refer to a sanitary sewer (excluding service lines).

*Shall* wherever used in this ordinance, will be interpreted in its mandatory sense.

*Short-Form Subdivision* shall refer to any subdivision plat which meets the requirements therefore contained in this article.

*Standard Specifications and Codes of the City* shall be applied to all improvements constructed within the city and shall be in accordance with all revisions, as may be adopted by the city.

*Storm Sewer or Storm Drain* shall refer to a pipe, conduit or channel which carries storm and surface water and drainage but excludes domestic sewage and industrial wastes.

*Street* means a way for vehicular traffic, whether designated a street, highway, thoroughfare, parkway, throughway, road, avenue, boulevard, lane, place or however otherwise designated.

*Street Right-of-Way Width* shall be the shortest distance between the lines which delineate the rights-of-way of a street.

*Subdivider or Developer* shall mean an individual, firm, association, syndicate, partnership, corporation or other organization dividing or proposing to divide land, or making improvements to such land, to affect a subdivision of land hereunder for himself, or for itself, or for another.

*Subdivision* shall be any division of any lot, tract or parcel of land into two (2) or more parts for the purpose of sales or of building development, whether immediate or future. It also includes re-subdivision or re-platting of land, lots or tracts. Divisions of land for agricultural purposes in parcels of five (5) acres or more shall not be included within this definition, unless any such division of five (5) acres or more includes the planning or development of a new street or extension of public utilities.

*Surveyor* shall mean a licensed land surveyor or a registered public surveyor, as authorized by the state statutes to practice the profession of surveying.

*Thoroughfare* shall be a principal traffic thoroughfare continuous across the city, intended to connect remote parts of the city, or areas adjacent thereto, and act as a principal connecting street with state and interstate highways.

*Thoroughfare Plan* means the official map depicting the City’s existing and future street system and roadway network, together with explanatory text. Thoroughfare plan includes the thoroughfare map.

*Utility Easement* shall mean an interest in land granted to the city, to the public generally, and/or to a private utility corporation, for installing or maintaining utilities across, over or under private land, together with the right to enter thereon with machinery, vehicles and people necessary for the maintenance of said utilities.

*Used for* includes the phrases, “arranged for,” “designed for,” “intended for” and “occupied for” and shall apply exclusively to physical uses.

*Variance* means a modification from the terms of this ordinance, as applied to a specific tract of property, if the modification is not contrary to the public interest and, due to special conditions, a literal enforcement of the ordinance would result in unnecessary hardship, and so that the spirit of the ordinance is observed, and substantial justice is done.

*Water Main - Public* shall refer to a pipe or conduit which is a part of a public water distribution system (excluding service lines).

*Water Main - Private* shall refer to a pipe or conduit which is not part of the public water distribution center and is maintained by a private entity.

**Sec. 10.103     Purposes, Authority and Jurisdiction**

(a)     Under the authority of chapter 212 of the Texas Local Government Code, as amended, which is hereby made a part of these regulations, the city does hereby adopt the following regulations to control the subdivision of land within the corporate limits of the city and in the unincorporated areas lying within the extraterritorial jurisdiction of the city, in order to provide for the orderly development of the areas and to secure adequate provisions for traffic, light, air, recreation, transportation, water, drainage, sewage and other facilities.

(b)     Any owner of land inside or within the extraterritorial jurisdiction of the city wishing to subdivide such land shall submit to the planning and zoning commission a plan of subdivision which shall conform to the minimum requirements set forth in these regulations. Any owner subdividing his land into parcels of greater than ten (10) acres each for agricultural or single-family use and not involving new streets or the extension of public utilities shall be exempt from these requirements.

(c)     No subdivision plat shall be filed for record and no lot in a subdivision inside of or within the extraterritorial jurisdiction of the city shall be improved or sold until the plat shall have been considered by the planning and zoning commission and approved by the city council. The city shall have the authority to prohibit the installation of public utilities in unapproved subdivisions and to prohibit the issuance of building permits for structures on lots in an unapproved subdivision.

(d)     Any violation of any provision of this article outside the corporate limits of the city shall not constitute a misdemeanor nor shall any fine be applicable to a violation within the extraterritorial jurisdiction of the city, however, a district court shall have the power to grant any or all types of injunctive relief in such cases.

**Sec. 10.104     Procedure**

(a)     Pre-Application Conference. Prior to the filing of a plat, the subdivider shall consult with the, fire marshal, and city engineer concerning compliance with the comprehensive master plan, the ultimate land use of the proposed development, the suitability of the location of the proposed subdivision, the most advantageous subdivision plan, the arrangement of streets, alleys and lots, and the layout of utility lines and availability of service from trunk mains.

(b)     Application Procedure.

(1)     All property not subdivided into lots, blocks and streets, or property to be subdivided within the city or within its jurisdiction, shall hereafter be laid out under the direction of the planning and zoning commission and city council and no other subdivision will be recognized by the city. Prior to the consideration of the plat by the planning and zoning commission, shall check the plat and make recommendations.

(2)     When a plat is filed with the city for review and approval, it shall be immediately forwarded to the engineer and/or The Planning and Zoning Commission, who will make a preliminary study of the plat. If it appears substantially complete, an on-site review of the tract to be subdivided will be made to determine any apparent problems with development of the subject land. Any plat which is found to be incomplete or requires significant changes shall be returned to the subdivider for additions or changes before resubmission.

(3)     It shall be unlawful for any owner, or agent of any owner, to lay out, subdivide or plat any land into lots, blocks and streets within the city, or to sell property therein, which has not been laid out, subdivided and platted according to these regulations.

(4)     No officer or employee of the city shall perform, or cause to be performed, any work upon any streets or in any addition or subdivision of the city, unless all requirements of these regulations have been complied with by the owner of the addition or subdivision.

(5)     The city hereby defines its policy to be that the city will withhold improvements of any nature whatsoever, including the maintenance of streets, issuance of building permits or furnishing of sewage facilities and water service, until the subdivision plat has been approved by the city council. No improvements shall be initiated, nor any contracts executed until this approval has been obtained.

(6)     Any owner or developer of any lot, tract or parcel of land located within the corporate limits of the city or within its extraterritorial jurisdiction who may wish to affect a subdivision of such land shall conform to the general procedure described as follows:

(A)     The subdivider shall prepare and submit a “preliminary plat” for subdivisions not eligible for the short form subdivision procedure;

(B)     In the case of a proposed phased development, the subdivider shall file a preliminary plat showing the entire proposed subdivision, the various phases by which the subdivision will be developed, and lots that will be sold within the phase to be developed upon approval of the final plat by the city council. If the subdivision is to be developed in phases or units, an overall master development plan for street, drainage, water and sewer improvements shall be submitted to the city engineer by the subdivider’s engineer at the time the first phase of construction is submitted for approval. This overall plan shall show the layout of streets and easements, lot configurations, water and sewer main locations and sizes, fire hydrant locations, manhole locations and drainage improvements;

(C)     After approval of the preliminary plat by the planning and zoning commission, and the city council the subdivider may then prepare a “final plat” of all or a portion of the land included in the preliminary plat for submission to and approval by the planning and zoning commission and then for final approval by the city council;

(D)     Upon final action on any such plat by the city planning and zoning commission, the same shall be referred to the city council, and the city council shall consider such final plat and approve the same if the plat shall in all things fully comply with the terms and provisions of this article;

(E)     Upon completion of required public facilities and acceptance by the city or the filing of a performance bond by the developer which covers said facilities that are not complete, copies of the approved final plat in the number determined by the engineer and or the Planning and Zoning Commission shall be submitted to the county clerk for recordation with CHAMBERS County. The recording of the final plat shall be the responsibility of the engineer;

(F)     In subdivisions approved for phased development no building permits shall be issued by the building official until the public improvements, including installation of franchise utilities, within that phase are completed and accepted by the city;

(G)     The subdivider shall include in the conditions of sale for each lot within the subdivision a notice to the purchaser that no certificate of occupancy shall be issued for any structure or building constructed therein unless and until the city has approved and accepted that phase of the subdivision;

(H)     All proposed improvements are to be installed or constructed at the subdivider’s own cost and expense, unless otherwise noted herein; and

(I)     Where a plat of a lot of record of undivided property is proposed to be subdivided and meets the criteria for abbreviated procedures set forth under the “short form subdivision,” and provided all the requirements have been met, the subdivider may submit a final plat to the city for approval. Where circumstances in the opinion of the administrative officer warrant, such plat may receive administrative approval, which action shall authorize the building official to issue a building permit for improvements on said parcel.

(c)     Preliminary Plat. The plat shall be drawn to a scale of not more than two hundred feet to the inch (1" = 200'). The information to be included and the procedures for submittals are as follows:

(1)     Legal description (metes and bounds) with total acreage.

(2)     Describe and locate all permanent survey monument pins, and control points, and ties and reference the survey corner at two points to the Texas State Plane Coordinate System North Central Zone 1983-1999 datum. The point of beginning (POB) shall be clearly marked including state plane coordinates, NAD 83.

(3)     An accurate location of at least two (2) corners of the subdivision with reference to original corners of the original survey of which the subdivision is a part or an existing permanent monument to an approved and recorded plat or permanent markers established by and approved by the city engineer.

(4)     North arrow.

(5)     Scale (both graphic and written) appropriate for the level of detail and not more than two hundred feet to the inch (1"=200').

(6)     Legend for any symbols used.

(7)     Location/vicinity map showing the location of the subject property, existing and proposed streets and thoroughfares covering an area at least one thousand feet (1,000') outside the proposed subdivision.

(8)     Title block with the following information:

(A)     Plat type (ex: “final plat”, “preliminary plat”, etc.);

(B)     Name of the proposed development/addition;

(C)     Total number of lots and HOA/open space lots;

(D)     Survey name and abstract number;

(E)     Gross acreage;

(F)     Right-of-way acreage if dedicated;

(G)     Date of preparation and subsequent revisions;

(9)     Block with name(s), address, phone number, and email of preparer, owner, developer, engineer, and/or surveyor.

(10)     Existing Features.

(A)     Location and dimension of all boundary lines (accurate in scale) with dimensions and bearings including lot lines, building lines, and city limits lines (if any).

(B)     The location, widths and names of all existing or platted streets or other public ways within or adjacent to the tract, parks, existing permanent structures, land dedicated within or contiguous to the subject property, railroads, rights-of-way, easements, and other important features, such as abstract lines, political subdivision or corporation lines, and school district boundaries.

(C)     Existing sewer mains, water mains, drainage culverts or other underground structures within the tract and immediately adjacent thereto with pipe sizes, grades, locations, and dimensions indicated.

(D)     Contours with intervals of two feet (2') or less, referred to mean sea level datum. In areas where the terrain is relatively flat, supplementary contours shall be shown so that the average horizontal distance between said lines does not exceed two hundred feet (200').

(E)     Subdivision name of adjacent (P.R.D.C.T) or ownership information for adjacent unplatted properties (D.R.D.C.T) with recording information.

(F)     Location of existing fire hydrants and fire lanes.

(11)     New Features.

(A)     The layout, names, and widths (from centerline to both edges as well as from edge to edge) of the proposed streets, fire lanes, drives, alleys and easements.

(B)     Length and radii of all street segments.

(C)     Curve table for all streets, drives, and alleys.

(D)     Acreage or square footage of rights-of-way dedicated should be shown, including corner clips and deceleration/turn lanes on the plat.

(E)     Lot and block numbers (lot number are numbers; and block numbers are letters), square footage, and other description according to the real estate records of the city or county auditor and recorder; also, designation of the proposed uses of land within the subdivision.

(F)     All parcels of land intended to be dedicated for public use or reserved in the deeds for the use of all property owners in the proposed subdivision, together with the purpose or limitations of such reservations.

(G)     The layout, numbers, setback lines and approximate dimensions of proposed lots, blocks, parks, etc.

(H)     Location of proposed fire hydrants and fire lanes.

(I)     USPS Postmaster approved location of mailboxes (if cluster mailboxes).

(J)     Proposed building line with square footage of the lot and proposed use.

(K)     Proposed parking layout.

(12)     Table showing the following information:

(A)     Listing of the lots with square footage and the associated lot widths at the front building line.

(B)     Square footage of the total building footprint and of each land use (if known).

(C)     Number of required and provided parking spaces.

(D)     Required and provided total landscaped area and front yard landscaped area.

(13)     Existing and proposed FEMA 100-year floodplain boundaries and elevation. Include minimum finished floor elevations (minimum 2 feet above the 100-year elevation) of all lots adjacent to floodplain. If the site does not contain a floodplain, note that: “No 100-year floodplain exists on the site.” A floodplain reclamation study will be required with final plat if necessary.

(14)     Submittals for preliminary plats shall include plans, documents, and information adequate for the review of the provision of public improvements to the properties involved. This includes but is not limited to streets, water service, wastewater service, franchise utilities, street lighting, and storm water detention (ex: preliminary drainage plan, preliminary utility plans, floodplain study, traffic impact study, etc.).

(15)     Two (2) copies of the typical cross-sections of proposed streets showing the width of pavement, type of pavement and location and widths of sidewalks when not in conformance with standard details.

(16)     Approval Block. The following notice shall be placed on the face of each preliminary plat by the subdivider:

“Preliminary Plat for Review Purposes Only.”

The following certificate shall be placed on the preliminary plat by the subdivider:

Approved for Preparation of Final Plat

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

City of OLD RIVER-WINFREE, TX               Date

Planning & Zoning Commission

(17)     Submission.

(A)     The subdivider shall furnish the city with one (1) copy of the drawings of the plat, plus any additional copies determined necessary for a complete review by the engineer services. The subdivider shall also provide any necessary supporting documents describing the type of development, provision of services, development procedure and timing, and engineering studies. Such materials shall be received in accordance with the submittal schedule as published by the department of development services.

(B)     The subdivider shall submit a letter of intent to the engineer and/or the of Planning and Zoning Commission providing their name and address, the contact information of the person(s) preparing the submitted documents and designating a point of contact for future correspondence. The letter shall also state the intent of the plat application, briefly describing the location, amount of land, and particulars as to the intended use(s) of the property and requesting that the plat be reviewed and considered by the appropriate approval body. Such letter of intent shall be received in accordance with the submittal schedule as published by the department of development services and shall be accompanied by an application for plat approval, the appropriate fee and drawings of the plat, as indicated herein.

(C)     A plat is “filed for approval by the city” when the engineer and/or the Planning and Zoning commission has certified to the applicant that a complete submittal providing required information for a comprehensive review has been received.

(D)     No plat will be considered filed with the city until and unless the prescribed application fees have been paid.

(18)     Approval.

(A)     The approval of the preliminary plat shall be effective for a period of one hundred eighty (180) days after the approval date, unless reviewed by the planning and zoning commission in the light of new or significant information, which would necessitate the revision of the preliminary plat. Such revision shall be subject to the same procedures as the original preliminary plat.

(B)     If a final plat for the subdivision, or a portion thereof, has not been submitted, or if a change in requirements has not occurred which would affect the preliminary plat, at the end of the one hundred eighty (180) days after approval, then the city planning and zoning commission may declare the preliminary plat null and void, unless the subdivider has requested and received an extension of time.

(19)     Exceptions. Where the subdivider may request exceptions or a waiver of these regulations or disagrees with the intent or interpretation of the requirements set forth herein, the city planning and zoning commission may submit such requests of the subdivider to the city council with recommendations for either an approval or disapproval.

(d)     Final Plat.

(1)     After approval of the preliminary plat, a final plat, prepared by a registered public surveyor and bearing his seal, shall be submitted to the city for consideration.

(2)     The subdivider shall furnish the city with one (1) copy of the drawings of the plat, plus any additional copies determined necessary for a complete review by the engineer and/or The Planning and Zoning Commission of development services. The subdivider shall also provide any necessary supporting documents describing the type of development, provision of services, development procedure and timing, and engineering studies. Such materials shall be received in accordance with the submittal schedule as published by the department of development services.

(3)     The subdivider shall submit a letter of intent to the engineer and/or the Planning and Zoning Commission of development services providing his name and address, the contact information of the person(s) preparing the submitted documents and designating a point of contact for future correspondence. The letter shall also state the intent of the plat application, briefly describing the location, amount of land, and o the intended use(s) of the property and requesting that the plat be reviewed and considered by the appropriate approval body. Such letter of intent shall be received in accordance with the submittal schedule as published by the department of development services and shall be accompanied by an application for plat approval, the appropriate fee and drawings of the plat, as indicated herein.

(4)     A plat is “filed for approval” by the city when the engineer and/or The Planning and Zoning Commission has certified to the applicant that a complete submittal providing the required information for a comprehensive review has been received.

(5)     No plat will be considered filed with the city until and unless the prescribed application fees have been paid.

(6)     No plat will be considered by the city until all the prescribed filing fees have been paid. The final plat may constitute all or only a portion of the approved preliminary plat, but any portion thereof shall conform to all the requirements of these regulations unless an exception has been granted by city council.

(7)     If final plats are submitted for approval for portions or sections of the proposed subdivision, each portion or section shall carry the name of the entire subdivision but shall bear a distinguishing letter, number or subtitle. Block letters shall run consecutively throughout the entire subdivision, even though such subdivision might be finally approved in sections.

(8)     Upon receipt of the proper submittal (required copies of the final plat, the detailed engineering plans and other required data, and payment of all applicable fees,) and the individual cost estimates for site improvements for water, sanitary sewer, storm sewer and paving improvements shall be prepared and submitted in accordance with the following table:

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| |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | | **Item No.** | **Description** | **Unit** | **Quantity** | **Unit Price** | **Cost** | |  |  |  |  |  |  | |  |  |  |  |  |  | |  |  |  |  |  |  | |

(9)     Also, to be included as other required data, the developer shall submit additional detailed cost estimates for any improvements to be constructed in which the city may be obligated for pro-rata or other refund amounts. These improvements shall be determined by the city and in accordance with the city’s comprehensive plan.

(10)     The final plat shall show or be accompanied by the following information:

(A)     The plat shall be drawn to a scale of not more than two hundred feet to the inch (1"=200')

(B)     The boundary marked with heavy weighted lines with accurate distances and bearings, a metes and bounds description of the boundary (error of closure shall not exceed one (1) in fifty thousand (50,000) for the plat boundary), exact acreage to hundredths, and the exact location and width of all existing or recorded rights-of-way intersecting the boundary of or bordering on the tract. One (1) copy of the traverse closure sheet shall be enclosed.

(C)     True bearings and distances to the nearest established street lines, official monuments or subdivision corner, which shall be accurately described on the plat. Municipal, township, county or abstract survey lines shall be accurately tied to the lines of the subdivision by distances and bearings, where applicable.

(D)     Describe and locate all permanent survey monument pins, and control points and ties and reference the survey corners at two points to the Texas State Plane Coordinate System North Central Zone 1983-1999 datum. The Point of Beginning (POB) shall be clearly marked including State Plane Coordinates, NAD 83.

(E)     An accurate location of at least two (2) corner of the subdivision with reference to an original corner of the original survey of which the subdivision is a part or an existing permanent monument on an approved and recorded plat or permanent markers established by and approved by the city engineer.

(F)     Subdivision name of adjacent properties (P.R.D.C.T) or ownership information for adjacent non platted properties (D.R.D.C.T.) with recording information

(G)     An accurate location of the subdivision in reference to the deed records of the county which shall include the volume and page of the deed of the property to be subdivided.

(H)     The exact layout, including:

(i)     Street and/or alley names;

(ii)     The length of all arcs, radii, internal angles and points of curvature, length and bearing of the tangents;

(iii)     All existing and proposed easements for right-of-way, public services, utilities, or any other easements and any limitations of the easements;

(iv)     Show centerline of existing street. Dimensions from centerline to edges of existing and proposed right-of-way on both sides of the centerline;

(v)     All lot numbers and lines, with accurate dimensions in feet and hundredths and with bearings and angles to street and alley lines to the nearest second.

(I)     The accurate location, material and approximate size of all monuments.

(J)     The accurate outline description of all property which is offered for dedication for public use, such as parks, etc., with the purpose indicated thereon, and all property that may be reserved by deed covenant for the common use of the property owners in the subdivision.

(K)     A signed and notarized copy of private restrictions (if any), that are filed for record in the office of the county clerk shall be provided with the final plat.

(L)     Name and address of the owner, subdivider, engineer, and surveyor.

(M)     North point, written and graphic scale and date.

(N)     3" x 3" recording box at the lower right hand corner.

(O)     A title block with the following information shall be provided on each page:

(i)     Plat type (ex: “final plat”, “preliminary plat”, etc.);

(ii)     Name of the proposed development/addition/subdivision;

(iii)     Total number of lots and HOA/Open Space lots;

(iv)     Survey name and abstract number;

(v)     Gross acreage;

(vi)     Right-of-way acreage, if dedicated;

(vii)     Date of preparation and subsequent revisions.

(P)     Standard notation to be added on the plat:

(i)     “All lots comply with the minimum size requirements of the zoning district.”

(ii)     “This property may be subject to charges related to impact fees and the applicant should contact the city regarding any applicable fees due.”

(iii)     “All common areas, drainage easements, and detention facilities will be owned and maintained by the HOA/property owner. Any common area within the city’s right-of-way will require a facilities agreement, to be reviewed and approved by the city.”

(iv)     “Notice - selling a portion of this addition by metes and bounds is a violation of state law and is subject to fines and withholding of utilities and building permits.”

(v)     “This plat does not alter or remove existing deed restrictions, if any, on this property.”

(vi)     “Minimum finished floor elevations (min. FFE) are at least two (2) feet above the 100-year floodplain.” - Add this note only if subject property is within or adjacent to the floodplain.

(vii)     “The subject property does not lie within a 100-year floodplain according to Community Panel No.\_\_\_\_\_\_\_\_\_\_\_\_, dated \_\_\_\_\_\_\_\_\_\_\_\_, of the National Flood Insurance Rate Maps for CHAMBERS County, Texas.”

(viii)     “The purpose of this plat is \_\_\_\_\_[state the purpose]\_\_\_\_\_\_\_\_\_.”

(ix)     “Bearings are based on the State Plane Coordinate System, Texas North Central Zone (4202), North American Datum of 1983 (NAD ‘83)”

(Q)     City limits line, if it traverses the subdivision.

(R)     Location map showing existing and proposed streets and thoroughfares covering an area at least one thousand feet (1,000') outside the proposed subdivision.

(S)     One paper copy (24" x 36") and one soft copy (pdf) of approved civil/construction plans, along with GIS/Cad files for all approved public improvements on a CD/DVD.

(T)     Construction plans must be submitted and approved prior to submission of final plat, must have profiles drawn on sheets, measuring twenty-four inches (24") by thirty-six inches (36"), the same size as the final plat, and must include the following information:

(i)     A plan and profile of each street with top of curb grades shown. Each sheet shall include north point, scale, date and benchmark description to mean sea level datum. Unless otherwise approved by the City, scales shall be one inch equals forty feet (1" = 40') horizontally and one inch equals four feet, five feet or six feet (1" = 4', 5' or 6') vertically. Each plan shall show the seal and signature of the registered professional civil engineer who prepared the plans;

(ii)     The typical cross-sections of proposed streets showing the width of roadways and type of pavement and location and width of sidewalk;

(iii)     A plan and profile of proposed sanitary sewers, with grades and pipe sizes indicated and showing locations of manholes, cleanouts, etc., and a plan of the proposed water distribution system showing pipe sizes and locations of valves, fire hydrants, fittings, etc., in conformance with the applicable criteria presented in Section 6, Improvements. Unless otherwise approved by the City, scales shall be one inch equals one hundred feet (1" = 100') horizontally and one inch equals four feet, five feet or six feet (1" = 4', 5' or 6') vertically. Each plan shall show the seal and signature of the registered professional civil engineer who prepared the plans. Each sheet shall include north point, scale, date and benchmark description to mean sea level datum;

(iv)     A plan and profile of the proposed storm sewers, showing hydraulic data, pipe grades and sizes, manholes, inlets, pipe connections, outlet structures, etc., in conformance with the criteria as shown in section 10.106, improvements. Unless otherwise approved by the city, scales shall be one inch equals forty feet (1" = 40') horizontally and one inch equals four feet, five feet or six feet (1" = 4', 5' or 6') vertically. Each plan shall show the seal and signature of the registered professional civil engineer who prepared the plans. Each sheet shall include north point, scale, date and benchmark description to mean sea level datum; and

(v)     A plan of all the other utilities, showing the relative locations proposed for the water, sewer, storm sewer and gas mains, utility poles, TV and electrical services, street lighting, traffic-control signs, and street signs, and acknowledged by the appropriate representative of each agency involved;

(U)     For conveyance plats only: All conveyance plats must be titled “conveyance plat” and carry the following text:

“Conveyance plat is a record of property approved by the City of OLD RIVER-WINFREE for the purpose of sale or conveyance in its entirety or interests thereon defined. No building permit may be issued, nor development begin, nor permanent public utility service provided until a final plat is approved, filed of record and public improvements are accepted in accordance with the City of OLD RIVER-WINFREE Code of Ordinances. Selling a portion of this property by metes and bounds, except as shown on an approved, filed and accepted conveyance plat, final plat or re plat is a violation of the state law.”

(V)     Certification by a registered public surveyor or licensed state land surveyor, registered in the State of Texas, to the effect that the plat represents a survey made by him or under his direct supervision and that all monuments shown thereon have been verified and exist, and that their location, size and material are correctly shown. Such surveyor’s certificate may be prepared as follows:

“State of Texas

County of CHAMBERS

I hereby certify that this plat is true and correct and was prepared from an actual survey of the property made on the ground under my supervision.

(Engineer or surveyor seal)

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

Licensed Professional Engineer OR          Date

Registered Public Land Surveyor - Texas R.P.L.S. No. \_\_\_\_\_\_”

(W)     A certificate of ownership and dedication of all streets, alleys, parks and playgrounds to public use forever, signed and acknowledged before a notary public, by the owner or authorized representative and lien holder of the land, and a complete and accurate description of the land subdivided, and the streets dedicated. Such owner’s certificate may be prepared as follows:

“State of Texas

County of CHAMBERS

I (we), the undersigned, owner(s) of the land shown on this plat within the area described by metes and bounds as follows:

(Metes and Bounds Description of Boundary)

NOW, THEREFORE, KNOW ALL PERSONS BY THESE PRESENTS:

THAT \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, acting herein by and through its duly authorized officer does hereby adopt this plat designating the hereinabove described property as \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (lot/lock/subdivision), an addition to the City of OLD RIVER-WINFREE, Texas, and does hereby dedicate to the public use forever by fee simple title, free and clear of all liens and encumbrances, all streets, thoroughfares, alleys, fire lanes, drive aisles, parks, and watercourses, and to the public use forever easements for sidewalks, storm drainage facilities, utilities, and any other property necessary to serve the plat and to implement the requirements of the subdivision regulations and other City codes and do hereby bind ourselves, our heirs, successors and assigns to warrant and to forever defend the title on the land so dedicated. Further, the undersigned covenants and agrees that he/she shall maintain all easements and facilities in a state of good repair and functional condition at all times in accordance with City codes and regulations. No buildings, fences, trees, shrubs, or other improvements or growths shall be constructed or placed upon, over, or across the easements as shown, except that landscape improvements may be installed, if approved by the City of OLD RIVER-WINFREE. The City of OLD RIVER-WINFREE and public entities shall have the right to access and maintain all respective easements without the necessity at any time of procuring permission from anyone.

WITNESS MY HAND this \_\_\_\_\_\_\_\_\_\_\_ day of \_\_\_\_\_\_\_\_\_, 20\_\_\_\_.

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, owner

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, Title and Company (if applicable)”

“State of Texas

County of CHAMBERS

Before me, the undersigned authority, on this day personally appeared, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he/she executed the same for the purposes and considerations therein expressed and in the capacity therein stated.

Given under my hand and seal of office this \_\_\_\_\_ day of \_\_\_ 20\_\_\_\_.

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

Notary Public in and for the State of Texas”

(X) The following certificate shall be included on the plat in a manner that will allow the signatures of the designated officials and the affixing of the city seal.

“Approved:

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

Chairman, Planning & Zoning Commission     Date

City of OLD RIVER-WINFREE, Texas

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

Mayor                              Date

City of OLD RIVER-WINFREE, Texas

Attested by

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

City Secretary, City of OLD RIVER-WINFREE, Texas          Date”

(Y)     Certificate from city tax collector and from the proper official of other taxing agencies within whose jurisdiction the proposed subdivision lies showing that all ad valorem taxes, liens and fees have been paid on the tract to be subdivided.

Two (2) sets of approved plans and specifications for water, sanitary sewer, paving and drainage improvements, prepared by a registered professional civil engineer, shall be submitted to the city prior to any construction in the subdivision.

The approval of the construction drawings by the city council shall be effective for a period of two (2) years after the approval date of the final plat unless the subdivider has requested and received an extension of time. Construction drawings which have expired shall be resubmitted to the city for approval before any construction is begun. The design of the proposed improvements shall be based on the construction requirements which are in effect at the time of submittal.

(e)     Procedure for Short Form Subdivision.

(1)     Any subdivision or replat thereof which may be determined to fall within the following criteria may be termed a “short form subdivision” and shall comply with the abbreviated procedures set forth herein. “Plats for record” or “lots of record” of non platted property shall be deemed to meet these criteria if:

(A)     The land in question is not being subdivided into more than three (3) lots;

(B)     The subdivision or use of the land subdivided does not necessitate any appreciable alteration of utility installations, streets, alleys or building setback lines; and

(C)     The tracts so subdivided conform in size and shape to the lots in the vicinity and the zoning in the immediate area.

(2)     All design, engineering, improvements and drawing information standards provided in these regulations applicable to all subdivisions shall be applicable to the short form subdivisions. Preliminary platting is not required.

(3)     If the engineer and/or the Planning and Zoning Commission finds that the final plat meets all the provisions of these regulations, he/she shall present the final plat to the commission and council for review.

(4)     The final short form plat shall be filed with the city accompanied with the required filing fee. After all requirements have been met and signatures obtained, the plat and all other necessary instruments shall be filed for record with the county clerk by the city secretary.

(5)     In the case of plats for record, after all requirements have been met and the final short form plat properly filed, administrative approval may be granted.

(f)     Construction of improvements.

(1)     The subdivider/developer shall contract for improvements except where city participation is involved. In cases of city participation, the developer/owner shall comply with state statutes and city regulations regarding competitive bidding.

(2)     The subdivider’s/developer’s engineer shall administer the contract.

(3)     A pre-construction conference, to be held at city hall, will be required. This conference shall be attended by the city engineer (or authorized representative), the subdivider’s/developer’s engineer, the engineer’s inspectors, the contractor(s), and other appropriate representative as deemed necessary by the city.

(g)     Amending Plat.

(1)     Any person who wishes to revise a subdivision plat which has been previously filed for record must make an application of the proposed revised plat to the city council. An amendment of a subdivision may be done for one of the following purposes:

(A)     To correct an error in a course or distance shown on the preceding plat;

(B)     To add a course or distance that was omitted on the preceding plat;

(C)     To correct an error in a real property description shown on the preceding plat;

(D)     To correct any other type of error or omission on a previously filed plat;

(E)     To replat one or more lots fronting on an existing street if:

(i)     The owners of all lots join in the application for amending the plat;

(ii)     The amendment does not attempt to remove any restrictions;

(iii)     The amendment does not increase the number of lots; and

(iv)     The amendment does not create or require the creation of a new street or make necessary the extension of municipal facilities.

(2)     A public hearing is not required for the approval and issuance of an amended plat.

(3)     The city engineer and Planning and Zoning Commission the approval responsibility of an amended plat. At any time, the city engineer may elect to present the plat for approval to the planning and zoning commission and to the city council, shall disapprove a plat, and upon refusal to approve the amended plat shall refer the amended plat to the planning and zoning commission and city council.

(h)     Replat or Resubdivision of Plats.

(1)     General.

(A)     Replat or resubdivision of a plat, or a portion thereof, but without vacation of the immediate previous plat, is hereby authorized; and shall be deemed valid and controlling, when approved, after a public hearing, by the planning and zoning commission, when:

(i)     It has been signed and acknowledged by all the owners of the particular property which is being resubdivided or replatted.

(ii)     It has been approved by the planning and zoning commission, after a public hearing in relation thereto at which parties in interest and citizens shall have an opportunity to be heard.

(iii)     It does not attempt to alter, amend, or remove any covenants, easements or restrictions.

(iv)     There is compliance, when applicable, with subsections (i), (ii), and (iii) of this section.

(2)     Filing Time. Replats or resubdivisions shall show or be accompanied by the information that is required for preliminary plats or final plats, whichever is applicable. Replats or resubmissions shall not be docketed for planning and zoning commission consideration unless the requirements of this chapter are met.

(3)     Notice and Hearing. The following additional requirements for approval shall apply, in any resubdivision or replatting of a subdivision, without vacating the immediate previous plat, if any of the proposed area to be resubdivided or replatted was, within the immediate preceding five (5) years, limited by an interim or permanent zoning classification to residential use for not more than two (2) residential units per lot, or if any lot in the immediate previous subdivision was limited by deed restriction to residential use for not more than two (2) residential units per lot:

(A)     Notice of planning and zoning commission hearing shall be given in advance, in the following manner:

(i)     Publication at least fifteen (15) days in advance of hearing being published in the official newspaper of the City of OLD RIVER-WINFREE.

(ii)     Written notice of such public hearing forwarded, with a copy of this subsection (3) attached, by the planning and zoning commission to owners (as the ownerships appear on the last approved ad valorem tax roll of such governing body) of all lots in the immediately preceding subdivision plat not less than fifteen (15) days prior to the date of such hearing. Such notice may be served by depositing the same, properly addressed and postage paid, in the post office in closest proximity to the city hall of the City of OLD RIVER-WINFREE, provided, however, if such immediate preceding subdivision plat shall contain more than one hundred (100) lots, such notice shall be mailed only to those owners of lots which are located within two hundred (200) feet of the lot or lots which are sought to be replatted or resubdivided.

(B)     If the proposed replat requires a variance or is protested in accordance with this subsection, the proposed replat must receive, in order to be approved, the affirmative vote of at least three-fourths of the members present of the planning and zoning commission and city council.

For a legal protest, written instruments signed by the owners of at least 20%; of the area of the lots or land immediately adjoining the area covered by the proposed replat and extending 200 feet from that area, but within the original subdivision, must be filed with the planning and zoning commission and city council prior to the close of the public hearings.

(C)     Provided, however, compliance with subsections (A) or (B) of this subsection (3) shall not be required for approval of a replatting or resubdividing of a portion of a prior plat, if all of the proposed area sought to be replatted or resubdivided was designated or reserved for usage other than for single- or duplex-family residential usage, by notation on the last legally recorded plat or in the legally recorded restriction applicable to such plat.

**Sec. 10.105     General Plat Requirements**

All requirements pertaining to lot size, yard size, dwelling size, lot coverage, height, parking, loading and screening contained in the current zoning ordinance of the city shall be adhered to for development under this article.

(1)     Streets.

(A)     The arrangement, character, extent, width, grade and location of all proposed streets shall conform to the general plan of the community, and their relationship shall be considered to that of the existing and planned streets, to topographical conditions, to public convenience and safety, and in their appropriate relation to the proposed uses of the land to be served by such streets.

(B)     The reservation in private ownership of strips of land, at the end of offered or existing streets intended solely or primarily for the purpose of controlling access to property not included in the subdivision shall be prohibited.

(C)     Where such is not shown in the general plan for the community, the arrangement of streets in a subdivision shall:

(i)     Provide for the continuation or appropriate projection of existing principal streets in surrounding areas;

(ii)     Conform to a plan for the neighborhood approved or adopted by the city to meet a situation where topographical or other conditions make continuation of or conformance to an existing street impracticable; and

(iii)     Be planned so that they shall intersect, as nearly as possible, at right angles.

(D)     Residential streets shall be aligned so that their use by through traffic is discouraged.

(E)     In phased developments, streets which are continuous through more than a single phase shall be provided with temporary turnarounds (at the point of temporary termination) until the street is fully constructed per the original approved plan.

(F)     Developers shall be required to coordinate all planning and engineering work with all adjacent property owners/developers.

(G)     Street jogs with centerline offsets of less than one hundred twenty-five feet (125') shall be avoided.

(H)     The street minimum right-of-way widths and centerline radius shall be in accordance with the city’s thoroughfare plan and shall conform to the following:

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| |  |  |  |  |  | | --- | --- | --- | --- | --- | | **Code** | **Type of Street** | **Minimum Right-of-Way Width** | **Minimum Centerline Radii** | **Intersection** | | FW | Freeway | 200 feet | Varies | varies | | P4U | Principal arterial four lane undivided | 100 feet | 150' | 1,000 feet | | P3U | Principal arterial three lane undivided | 75 feet | 85' | 1,000 feet | | M4U | Minor arterial four lane undivided | 80 feet | 90' | 1,000 feet | | C2U | Collector two lane undivided | 60 feet | 75' | 500 feet | | R2U | Residential/local two lane undivided | 50 feet | 70' | 250 feet | | REU | Residential/estate two lane undivided | 60 feet | 75' | 250 feet | |

(I)     Streets shall be classified according to the following:

(i)     Arterial (Principal, Minor): The main function of arterial is to carry traffic from one urban area to another. The thoroughfare system serves the major activity centers of urbanized areas. An arterial is used for longer urban trips and carries a high portion of the total traffic with a minimum of mileage.

(ii)     Collector: Carries traffic from local streets to arterial. Also, may serve local facilities such as schools and churches. Uses served would include medium and high density residential, limited commercial facilities, elementary schools, some small offices and as direct access within industrial parks. Collector streets also carry heavy traffic to major commercial and industrial facilities from thoroughfare. Uses would include office parks, industrial parks, and community level commercial facilities.

(iii)     Residential/Local: Carries traffic from residential and commercial areas to collector streets and interconnects individual sites. Local streets carry light traffic volumes and trips are of a short duration.

(iv)     Residential/Estate: Carries traffic from rural residential areas to collector streets and interconnects individual sites. Local streets carry light traffic volumes and trips are of a short duration. This type of street section can only be utilized in residential subdivisions of lots at least 1-1/2 acres in size.

(J)     Street widths proposed for industrial subdivisions or commercial developments shall be not less than that required for a collector.

(K)     Half streets shall be prohibited, except where there is no alternative for reasonable development of the subdivision in conformance with the other requirements of these regulations and where the city finds it will be practicable to require the dedication of the other half when the adjoining property is subdivided. Wherever a half street has already been provided adjacent to an area to be subdivided, the other remaining portion of the street shall be platted within such subdivision. Where part of a residential or collector street is being dedicated along a common property line, the first dedication shall be one-half (1/2) of the proposed street right-of-way plus five feet (5') unless a construction easement on the adjoining parcel has been obtained, and the developer shall construct the half street or place in escrow cash for the estimated half-paving cost as determined by the city council.

(L)     Cul-de-sacs in residential additions shall not be longer than six hundred feet (600') from the nearest intersection, except under unusual conditions with the approval of the city council, and there shall be provided at the closed-end a turnaround having a minimum outside roadway diameter of eighty-one feet (81'). In industrial areas, cul-de-sacs shall not exceed one thousand feet (1,000') from the nearest intersecting street, and there shall be provided at the closed-end a turnaround having a minimum outside roadway diameter of one hundred feet (100') and a minimum street property line diameter of one hundred feet (100'). Alternate turnaround designs in residential tract developments which provide adequate turnaround area may be considered or approved by the city.

(M)     All streets shall be paved, and paving shall conform to the requirements of section 10.106, improvements, of these regulations.

(N)     Street grades shall be established regarding topography, proposed land-use and the facilities in the area surrounding the land to be subdivided. Minimum grades shall be five-tenths percent (0.50%) on concrete streets and five-tenths percent (0.50%) on all other types of street paving. Cross (transverse) slopes between pavement and the right-of-way shall not be less than 100:1 or steeper than 3:1. Where necessary, additional right-of-way or slope easement shall be provided to meet this requirement.

(O)     Street name markers shall be installed in accordance with the prescribed type currently in use by the city or an approved equal, as approved by the city council. Street markers and erections will be at the expense of the subdivider.

(P)     The materials for all traffic-control and regulatory signs shall be furnished by the subdivider and installed by the city for all intersections within or abutting the subdivision. Such signs shall be in strict compliance with the regulations of the Federal Highway Administration and according to the requirements of the Manual on Uniform Traffic-Control Devices, latest edition. No signs will be placed in undeveloped portions of the subdivision.

(Q)     The subdivider shall comply with the guidelines and criteria for driveways, including the design requirements, grades, spacing, and access standards as provided by the city’s thoroughfare plan.

(R)     If a proposed development is projected to generate a lesser traffic volume than would normally require roadways as specified in the master thoroughfare plan, the developer may install a “minimum acceptable alternative” approved by the city. The full right-of-way and pavement thickness are unchanged. Only the outside two (2) lanes would be paved in this situation. The city must approve the use of this option.

(2)     Alleys.

(A)     Alleys are not required, except where the city has determined that one is necessary for adequate service access, such as off-street loading, unloading and parking consistent with and adequate for the uses proposed.

(B)     All alleys shall be paved with reinforced concrete, and the paving shall conform to section 10.106, improvements, of these regulations.

(C)     All alleys must be privately maintained by the homeowners’ association or other entity.

(D)     The minimum width of any alley shall be twenty feet (20') in industrial and commercial areas and fifteen feet (15’) in residential areas.

(E)     Alley intersections, sudden changes in alignment, and dead-end alleys shall be avoided.

(F)     Residential driveway and alley pavement cuts must be approved by the city engineer onto loop and major thoroughfares. Alleys on frontage roads shall be provided along side and rear lot lines which front on loop and major thoroughfares for rear entrance.

(3)     Gated Community/Private Streets.

(A)     Private streets in gated communities shall conform to the same standards regulating the design and construction of public streets. A gated community will only be permitted in a planned development (PD) zoning district.

(B)     Any gate installation must conform to the following provisions:

(i)     All gate installations must be approved by the city prior to installation. The installation must be completed and tested prior to the city’s acceptance of the subdivision.

(ii)     Gate design may incorporate one or two gate sections to meet the required minimum gate width of twenty-four feet (2'). If the entrance will incorporate a median, guard shack or similar structure that necessitates a divided gate arrangement, the gate widths may be reduced if approved by the city, but in no case shall any single gate or street pavement have a clear opening of less than twenty (20) feet.

(iii)     Approach and departure areas on both sides of a gated entrance must provide adequate setbacks and proper alignment to allow free and unimpeded passage of emergency vehicles through the entrance area. All entry gates must be setback a minimum of 100 ft from any adjacent public street right-of-way to allow for vehicle stacking out of the public travel lanes. Any exception must be approved by the city.

(iv)     Automatic gate installations must conform to the design and performance guidelines established by the fire Marshall.

(v)     All components of the gate system must be maintained in an approved operating condition, with all components serviced and maintained on a regular basis as needed to insure proper gate operation. A proper power supply shall be maintained to all electrical and electronic components at all times.

(vi)     Each security gate regulated under this section will be subject to a performance test as determined by either the fire chief or public works or a designated city official. Upon failure of a performance test, the security gate system shall be disabled and maintained in the open position until repaired and shall not be placed back in service until tested and authorized by the city.

(vii)     All streets, gates and other fire protection features, signage, and equipment are subject to periodic inspection by the city and must be repaired immediately if found to be in condition of disrepair. The city shall have the right to enter the subdivision and disable, open, or remove any gate, device, or other feature that impedes or controls vehicle access at the sole expense of the homeowner’s association. Emergency repairs shall be assessed against the homeowner’s association.

(viii)     The person or corporation in control of the property is responsible for, and liable for any violations of this section. This includes, but is not limited to, the developer, property owner, the homeowner’s association and its officers, if applicable, or other who may own or exercise control over the property.

(C)     Property Associations Required. Subdivisions developed with private streets or alleys must have a mandatory property owners association which includes all property served by private streets or alleys. The association shall own and be responsible for the maintenance of private streets, parks and other homeowner association appurtenances. The association documents shall be reviewed by the city attorney and subject to approval by the city to ensure that they conform to this and other applicable city ordinances and concerns. The documents shall be filed of record prior to the approval of the final plat. Lot deeds may not be dissolved without the prior written consent of the city. No portion of the association documents pertaining to the maintenance of the private streets and alleys and assessments therefore [therefor] may be amended without the written consent of the city.

(D)     Private Street Lot. Private streets and alleys must be constructed within a separate lot owned by the property owners’ association. This lot must conform to the city’s standards for public street and alley right-of-way. An easement covering the street lot shall be granted to the city providing unrestricted use of the property for utilities and storm drainage systems and the maintenance of same. This right shall extend to all utility providers including telecable companies, operating within the city. The easement shall also provide the city or its contractors with the right of access for any purpose related to the exercise of a governmental service or function, including but not limited to fire and police protection, inspection and code enforcement, trash collection or utility maintenance. The easement shall permit the city to remove any vehicle or obstacle within the street lot that impairs emergency access.

(E)     Construction and Maintenance Cost. The city shall not pay for any portion of the cost of construction or maintaining a private street. The homeowners’ association shall maintain an escrow account as approved by the city for all road maintenance.

(F)     Reserved.

(G)     City Utilities. Water, sewer and drainage facilities placed within the private street and alley lot shall be installed to city standards and dedicated to the city as part of the approval of the final plat. All city regulations relating to infrastructure, financing, developer cost participation and capital cost recovery shall apply to developments with private streets except for those applying to internal street construction.

(i)     Street lights and signs shall be installed and maintained by the homeowners’ association subject to approval by the city.

(ii)     The property association documents shall give the city the right, after giving written notice to perform maintenance upon streets and alleys to protect health, safety and welfare of the residents and to place a lien upon the lots within the association to recover the cost of such maintenance.

(H)     Plans and Inspections. Developments proposed with private streets must submit to the city the same plans and engineering information required to construct public streets and utilities. Requirements pertaining to inspection and approval of improvements prior to issuance of building permits shall apply. Inspection fees charged for these services shall also apply. The city may periodically inspect private streets and require repairs necessary to ensure emergency access.

(I)     Waiver of Services. The subdivision final plat, property deeds and property owners’ association documents shall note that certain city services shall not be provided on private streets. Among the services which will not be provided are: routine police patrols, street lighting, enforcement of traffic and parking ordinances and preparation of accident reports. All private traffic regulatory signs shall conform to the Texas Manual of Uniform Traffic-Control Devices. Depending on the characteristics of the proposed development other services may not be provided.

(J)     Petition to Convert to Public Streets. The property association documents shall allow the association to request [that] the city accept private streets and alleys and the associated property as public streets and right-of-way upon written notice to all association members and the favorable vote of 75% of the membership. However, in no event shall the city be obligated to accept said streets and alleys as public. Should the city elect to accept the streets and alleys as public, the city may inspect the private streets and assess the lot owners for the expense of needed repairs concurrent with the city’s acceptance of the street and alleys.

The city will be the sole judge of whether repairs are needed. The city may also require, at the association’s expense, the removal of guard houses, access control devices, landscaping or other aesthetic amenities located within the street lot. The association document shall provide for the city’s right to such assessment. Those portions of the association documents pertaining to the subject matter contained in this paragraph shall not be amended without the written consent of the city.

(K)     Hold Harmless. On the subdivision final plat shall be language whereby the property owners association, as owner of the private streets and appurtenances, agrees to release, indemnify, defend and hold harmless the city, any governmental entity and public utility for damages to the private street occasioned by the reasonable use of the private street by the city, governmental entity or public utility, for damages and injury (including death) arising from the condition of said private street; for damages and injury (including death) arising out of the use by the city, governmental entity or public utility of any restricted access gate or entrance; and for damages and injury (including death) arising out of any use of the subdivision by the city, governmental entity or public entity. Further, such language shall provide that all the owners of all lots shall release the city, governmental entities and public utilities for such damages and injuries. The indemnifications contained in this paragraph apply regardless of whether such damages and injury (including death) are caused by the negligent act or omission of the city, governmental entity or public utility, or their representative officers, employees or agents.

(L)     Sidewalks and Bikeways.

(i)     Sidewalks. Sidewalks shall be constructed in accordance with city standards for all lots adjoining dedicated streets, along major thoroughfares where lots do not adjoin the street or in other areas as required by the city. Sidewalk construction may be delayed until development of lots, but in locations not adjacent to lots and across bridges and culverts, the sidewalk shall be constructed with the other improvements to the subdivision or addition. Exceptions to this section must be approved by the city.

(ii)     Pedestrian Accesses. The city may require, in order to facilitate Pedestrian access from the streets to schools, parks, playgrounds, or other nearby streets, perpetual unobstructed easements at least fifteen (15) feet in width. Easements will be indicated on the plat.

(iii)     Bikeways. Hike and bike sidewalks, designed and located according to city standards, shall be constructed along streets designated for hike and bike trails. Such sidewalks shall be built by the owner at the time of site development.

(M)     Drainage and Storm Sewers.

(i)     General Requirements. All plats shall conform to the city’s standards for drainage facilities.

(ii)     Design of Facilities. Design of storm sewer systems shall be in accordance with city standards. Materials and construction shall conform to the standard specifications.

(N)     Secondary Access. All gated subdivisions shall provide a secondary access point accessible by means approved by the city and the fire marshal for emergency services unless specifically exempted by the city.

(O)     Federal Requirements. The post office requires 7-day access for mail delivery. If a security gate or fencing is used, a key keeper box with retractable key reel that will accommodate a post office arrow lock and/or the device (mechanical/electronic) needed to gain access into complex, must be installed next to the door or gate that the carrier uses to enter the complex. (Systems that use a key board to punch in codes, in most cases, will accept a post office arrow lock in the control panel).

Note: Carriers must not carry keys, written codes, electronic openers or badges for entrance into buildings or complex.

(4)     Lots.

(A)     Lot Size: The size or area of the lot shall be measured in square feet and shall conform to the zoning requirements for the area.

(B)     Corner Lots: Corner lots with a width of less than seventy-five feet (75') are to be at least five feet (5') wider than the average of interior lots in the block. Corner lots with a width of less than eighty-five feet (85') adjacent to a thoroughfare are to be at least fifteen feet (15') wider than the average of interior lots in the block.

(C)     Lot Shape: Lots should be rectangular where practicable. Sharp angles between lot lines should be avoided. The ratio of depth to width should not ordinarily exceed two and one-half to one (2-1/2:1).

(D)     Lot Facing:

(i)     Each lot shall be provided with adequate access to an existing or proposed street by frontage on such street. Residential lots shall front on residential class streets;

(ii)     Double frontage lots are prohibited except where the lot has rear frontage on thoroughfares; and

(iii)     Wherever feasible, each lot should face the front of a similar lot across the street. In general, an arrangement placing facing lots at right angles to each other should be avoided.

(E)     Lot Lines: Radial to street frontage, and the following note may be used on the plat in lieu of bearings: “All side lot lines are perpendicular or radial to street frontage unless otherwise noted.”

(F)     Lot Numbering: All lots are to be numbered consecutively within each block. Lot numbering may be cumulative throughout the subdivision if the numbering continues from block to block in a uniform manner that has been approved on an overall preliminary plat.

(G)     Lot Grading: Finished grade for the building site will be not less than six inches (6") above the top of the curb grade or alley pavement or two feet (2') above the adjacent base flood elevation as defined by the Federal Emergency Management Agency, whichever is greater. In any case, the property line grades adjacent to the street should not be below the top of curb grade.

(H)     Exceptions: Plats involving cluster developments or zero-lot lines shall be reviewed by the city on a case-by-case basis.

(5)     Easements.

(A)     Use: Where necessary to provide access for the purposes of maintenance, construction or other service, easements shall be provided for poles, wires, conduits, storm sewers, sanitary sewers, water lines, open drainage, floodplains, gas lines or other utilities. Such easements may be required across parts of lots, including rear and side lot lines, where alleys are not provided.

(B)     Size: Where possible, easements shall be provided fully located upon one (1) lot and shall be not less than fifteen feet (15') in width. Where such is not feasible, easements shall be not less than seven and one-half feet (7-1/2') on each side of the lot line.

Where overhead utility service on poles is allowed, an additional easement of five feet (5') on each side shall be provided. The full width of easements shall not be less than twenty-five feet (25').

Where a subdivision is bounded by a watercourse, drainage way, channel or stream, there shall be provided a storm water easement or drainage right-of-way conforming substantially to the lines of such watercourse, or of such width to provide for any future anticipated construction, plus a minimum to ten feet (10') on each side.

(C)     Where Required by the City, Emergency Access Easements shall have: (i) a clear, unobstructed width of twenty-four feet (24'); (ii) an all-weather surface constructed and maintained by the owner; (iii) a connection at each end to a dedicated public street or have a turnaround of suitable size at the dead-end; and (iv) appropriate turning space at inside corners to permit free movement of fire trucks. An emergency access easement may be used as a driveway to gain access to parking or loading spaces but shall not be used for parking. The limits of the easement shall be marked by the city, and the marking shall be maintained by the city.

(6)     Blocks.

(A)     The lengths, widths and shapes of blocks shall be determined with regard to the following items:

(i)     Provision of adequate building sites suitable to the special needs of the type of use proposed;

(ii)     Zoning requirements as to lot sizes and dimensions;

(iii)     Needs for convenient access, circulation, control and safety of traffic; and

(iv)     Limitations of topography.

(B)     Where no existing subdivision controls, the blocks shall not exceed one thousand feet (1,000') in length nor be less than five hundred feet (500') in length, except in certain instances where topographical features warrant special consideration. These limits shall be exceeded only upon specific approval by the city. Blocks longer than six hundred feet (600') shall be avoided in business districts.

(C)     Blocks are to be numbered or lettered consecutively within the overall plat and/or section of an overall plat, as recorded.

(7)     HUD-Code Manufactured Home Park.

(A)     Location.

(i)     Mobile homes/mobile home parks are prohibited within the city limits.

(ii)     HUD-code manufactured homes may only be located in the appropriate zoning districts as permitted in chapter 14 of this code.

(B)     Platting. HUD-code manufactured home parks are governed by the same requirements for all other subdivisions. Both preliminary and final plats will be required, and both will be subject to the specifications of sections 10.104(c) and 10.104(d) of this article.

(C)     Streets. Each HUD-code manufactured home park must abut a public street and provide access there from. Each lot/unit may only be accessed from a private interior street. Minimum pavement widths of interior streets shall be twenty feet (20') to allow for emergency vehicle and trash removal access and shall have a nine-foot (9') parking lane on one side of the street, and a marked fire lane. All streets must be maintained by the park owner.

(D)     Screening. Each HUD-code manufactured home park must include a landscaping/screening plan to buffer the park from adjoining land uses. (This plan must receive approval from the city engineer.) A landscaped strip of not less than ten feet (10') in width shall be established and maintained within the park’s property along the exterior boundaries. Fencing and other materials must also be used as approved by the city engineer.

(E)     Utilities. A master water meter and backflow prevention device shall be installed at the connection to the public water main. The water and sewer lines in each HUD-code manufactured home park must remain private and will be maintained by the park owner. The park owner is responsible for the entire water and sewer usage fees and individual lots will not be billed by the city.

(F)     Prohibited Use. No HUD-code manufactured home for the purpose of residential living shall be located outside an approved HUD-code manufactured home park. HUD-code manufactured homes in approved parks must be used for no other purpose than residential and will be allowed only as a temporary residence during home construction, as a construction/security office, or as a temporary business site if the permanent building is being rebuilt/rehabilitated. These temporary uses must not exceed one (1) year. Extensions may be granted by the city upon proof of extreme hardship. These regulations shall not apply to manufactured housing.

(G)     Additional Requirements. All other sections of this document shall apply as appropriate to HUD-code manufactured home parks. The city council may also impose additional conditions, requirements or limitations concerning the design, development and/or operation of said park as it deems necessary for the protection and general welfare of adjacent properties and the public interest.

(H)     Filing Fees. Refer to section 10.107, filing fees and charges, of this article.

(8)     Survey Monuments and Lot Markers.

(A)     Permanent Survey Reference Monuments. A concrete monument, six inches (6") in diameter and twenty-four inches (24") long, shall be placed on all boundary corners, block corners, curve points and angle points. A copper pin one-fourth inch (1/4") in diameter embedded at least three inches (3") in the monument shall be placed at the exact intersection point on the monument. The monuments shall be set at such an elevation that will not be disturbed during construction, and the top of the monument shall be not less than twelve inches (12") below the finished grade of the development.

(B)     Lot Markers. Lot markers shall be one-half inch (1/2") reinforcing bar, eighteen inches (18") long, or approved equal, and shall be placed at all lot corners flush with the ground, or below ground, if necessary, in order to avoid being disturbed.

(C)     Schedule for Placement. At the developer’s option, permanent monuments and lot markers may be placed before or following construction of on-site improvements. If installed prior to construction, the final plat of the subdivision will be filed for record as set forth in section 10.104 of these regulations. If installed following construction of improvements, the plat will be held for filing until, and the certificates of occupancy will be issued when the monuments and markers are set (see section 10.106(m) surveyor’s certificate).

**Sec. 10.106     Improvements**

(a)     Standard Specifications and Construction Details.

(1)     All improvements proposed for any subdivision to be developed under the jurisdiction of these ordinances shall be furnished and installed by the subdivider in accordance with the applicable divisions of the North Central Texas Council of Governments (NCTCOG) standard specifications for public works construction, as adopted by the city and the other applicable specifications noted herein, or in the absence of such specifications and details, to meet the approval of the city.

(2)     References are made herein to specific divisions, items and sections of the NCTCOG standard specifications, and it is not intended to preclude other portions of the NCTCOG standard specifications that may be appropriate and applicable to the development of a subdivision. Therefore, by reference to the fact that the city has adopted the NCTCOG standard specifications for public works construction, the NCTCOG standard specifications, latest edition, are to be considered a part of this ordinance.

(3)     All improvements, even in previously approved but still unimproved subdivisions, or in resubdivided tracts, shall conform to the city’s current regulations and specifications for street, drainage and utility construction.

(4)     Where reference is made within these regulations to the standard specifications, it shall be understood that the word “owner” is to be interpreted as the developer or subdivider and the words “engineer,” “inspector,” and “owner’s representative” are to be interpreted as the developer’s engineer. Where the standard specifications allow options not specifically addressed by these regulations, the developer’s engineer shall request guidance from the city engineer in writing.

(b)     Street Paving - Concrete.

(1)     Concrete Strength Requirements.

(A)     Concrete Curb and Gutter. Concrete curb and gutter shall be constructed thirty inches (30") in width and in accordance with division 8, item 8.2, of the Standard Specifications.

(B)     Reinforced concrete pavements and monolithic curb refer to Standard Specifications, division 5, item 5.8.

(2)     Pavement Thickness Requirements. The following specifies minimum standards required for the pavement and subgrade design for roadways and alleys within the city. These minimum standards are not intended to replace the professional judgment of the geotechnical engineer for any specific project. The standards may need to be expanded or modified on a case-by-case basis as determined necessary and appropriate by the geotechnical engineer, and as approved by the city engineer.

All roadways and alleys shall have a geotechnical investigation and pavement and subgrade design performed. Results of the geotechnical investigations, engineering analyses, and recommendations shall be presented in a geotechnical report for roadways (“report”). The report and any subsequent reevaluations or supplemental reports shall be signed and sealed by a licensed professional engineer in the State of Texas trained and qualified to provide geotechnical engineering analysis and pavement and subgrade design recommendations.

(A)     Residential/Local Street, Residential/Estate Street and Alley Construction.

(i)     The subdivider shall, at his own cost and expense, pay for constructing all residential streets and alleys within his subdivision and one-half (1/2) of all existing and/or proposed perimeter streets. Monies for the construction of the one-half (1/2) street shall be placed in an escrow account if the construction of the street is to be deferred to a later date.

(ii)     A six-inch (6") thickness of three thousand six hundred (3,600) p.s.i. reinforced concrete pavement on a compacted sub-base shall be required. All steel reinforcing shall be deformed No. 3 bars on eighteen-inch (18") center both ways or No. 4 bars on twenty-four-inch (24") centers both ways.

(iii)     Where the plasticity index of the soil is twelve (12) or greater, stabilization of the subgrade, eight inches (8") thick with six percent (6%) hydrated lime by weight, shall be required. Compaction of the lime stabilized sub-grade shall be according to the Standard Specifications, division 4, item 4.6., section 4.6.4(d).

(iv)     Unless otherwise approved by city, the concrete shall be placed using either forms or slipform paver. Concrete strength shall be increased to four thousand (4,000) p.s.i. for hand poured concrete.

(v)     Any proposed pavement section of lesser thickness or alternate materials shall be fully documented by the design engineer to substantiate the fact that such alternate will provide an equivalent capacity for the pavement noted above and must be approved by the city.

(B)     Collector, Commercial or Industrial Street and Alley Construction.

(i)     The subdivider shall, at his own cost and expense, pay for constructing all streets and alleys within his subdivision and one-half (1/2) of all existing and/or proposed perimeter streets. Monies for the construction of the one-half (1/2) street shall be placed in an escrow account if the construction of the street is to be deferred to a later date.

(ii)     Collector streets and alleys shall, at a minimum, be designed and constructed with eight-inch (8") thickness of four thousand (4,000) p.s.i. reinforced concrete pavement on a compacted sub-base. All steel reinforcing shall be deformed No. 4 bars on eighteen-inch (18") centers both ways.

(iii)     Where the plasticity index of the soil is twelve (12) or greater, stabilization of the subbase with an eight-inch (8") thickness of six percent (6%) hydrated lime by weight will be required. Compaction of the lime stabilized sub-grade shall be according to the Standard Specifications, division 4, item 4.6., section 4.6.4(d).

(iv)     Unless otherwise approved by city, the concrete shall be placed using either forms or slipform paver. Concrete strength shall be increased to four thousand five hundred (4,500) p.s.i. for hand poured concrete.

(v)     Any proposed pavement section of lesser thickness or alternate materials shall be fully documented by the design engineer to substantiate the fact that such alternate will provide an equivalent capacity for the pavement noted above and must be approved by the city.

(C)     Major or Secondary Thoroughfare Construction.

(i)     On roadways, adjacent to the proposed subdivision, that are designated to be major or secondary thoroughfares (except class A Loop Highway), the subdivider shall be required to construct, at his own cost and expense, one-half (1/2) of the street section, up to a width of twenty-four feet (24'), measured to face of curbs, with integral curbs on each side.

(ii)     Where thoroughfares traverse a subdivision, the subdivider shall be required, at his own cost and expense, to construct a twenty-four foot (24') wide section on each side of the roadway.

(iii)     Thoroughfares shall be designed and constructed with a nine-inch (9") thickness of four thousand (4,000) p.s.i. reinforced concrete pavement on a compacted sub-base. All steel reinforcing shall be deformed No. 4 bars at eighteen-inch (18") centers both ways.

(iv)     Where the plasticity index of the soil is twelve (12) or greater, stabilization of the subgrade, ten inches (10") thick with six percent (6%) hydrated lime by weight, shall be required. Compaction of the lime stabilized sub-grade shall be according to the Standard Specifications, division 4, item 4.6., section 4.6.4(d).

(v)     Unless otherwise approved by city, the concrete shall be placed using either forms or slipform paver. Concrete strength shall be increased to four thousand five hundred (4,500) p.s.i. for hand poured concrete.

(vi)     Any proposed pavement section of lesser thickness or alternate materials shall be fully documented by the design engineer to substantiate the fact that such alternate will provide an equivalent capacity for the pavement noted above and must be approved by the city.

(3)     Paving Width Requirements.

(A)     Residential/Local Streets, Residential/Estate Streets, Collector Street, and Alleys.

(i)     Residential/local street paving shall be a minimum of thirty-one feet (31') in width, measured between the faces of curbs.

(ii)     Residential/estate street paving shall be a minimum of twenty-eight feet (28') in width, measured from edge to edge of pavement.

(iii)     Collector street paving shall be a minimum of forty feet (40') in width, measured between the faces of the curbs.

(B)     Thoroughfares. The following minimum pavement widths are set by this ordinance for the construction of thoroughfares as follows:

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  |  | | --- | --- | --- | | **Thoroughfare Classification** | **Minimum Right-of-Way Width** | **Minimum Pavement Width Between Faces of Curbs** | | Class A (loop) | 180' | Two 12' traffic lanes on each side of the roadway centerline | | Class B (major) | 120' | Three 12' traffic lanes divided by a 16' median | | Class C (major) | 100’ | Three 11’ traffic lanes divided by a 15’ median | | Class D (secondary) | 80’ | Four 11'’ traffic lanes or two 12' traffic lanes and two 10" parking lanes | |

Note: The minimum width of a median adjacent to a left turn lane shall be five feet (5').

(C)     Street Returns.

(i)     The minimum radii for all street returns shall be twenty feet (20') on collector and minor streets and thirty feet (30') on thoroughfares.

(ii)     Returns for driveways on minor streets shall be ten feet (10'). Driveway returns onto commercial and industrial property shall be a minimum of fifteen feet (15') and a maximum of twenty-five feet (25') except in special cases.

(4)     Miscellaneous.

(A)     Reinforcing Steel. Steel furnished for street and alley paving shall meet Standard Specifications, division 2, item 2.2., sections 2.2.6. and 2.2.7.

(B)     Sawed Dummy Joints. Refer to Standard Specifications, division 5, item 5.8., section 5.8.2.

(C)     Expansion Joints. Refer to Standard Specifications, division 5, item 5.8., section 5.8.2.

(D)     Longitudinal Pavement Slopes. The maximum longitudinal slopes are as follows:

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  | | --- | --- | | **Type of Street** | **Maximum Slope** | | Class A - Major Thoroughfare | 6% | | Class B - Major Thoroughfare | 6% | | Class C - Major Thoroughfare | 6% | | Class D - Secondary Thoroughfare | 6% | | Class E - Collector | 8% | | Class F - Collector | 8% | | Class G - Minor (residential) | 10% | |

Maximum grades for an alley shall be eight percent (8%) within thirty feet (30') of its intersection with a street and fourteen percent (14%) elsewhere. Maximum longitudinal slopes within one hundred feet (100') of intersections shall not exceed two percent (2%).

(E)     Transverse Pavement Slopes. The transverse pavement slope for all non-divided streets may consist of either a straight cross slope or a parabolic curve from the pavement centerline to the gutter. The crown at the pavement centerline shall be four inches (4") above the gutter grade on residential streets and six inches (6") on collector streets and secondary thoroughfares. For divided streets, the transverse slope shall be as required by the city engineer.

(F)     Lime Stabilization. Refer to NCTCOG Standard Specifications, division 4, item 4.6.

(c)     Sidewalks. Refer to NCTCOG Standard Specifications, division 8, item 8.3.

(1)     Concrete sidewalks shall be constructed on both sides of streets and thoroughfares, except in industrial areas and along residential/estate streets, by the subdivider. The sidewalks shall have a width of not less than four feet (4') and thickness of not less than four inches (4") and shall be constructed of three thousand (3,000) p.s.i. concrete on both sides of all streets within the subdivision and of a width not less than eight feet (8') on all major thoroughfares. Sidewalks shall be constructed one foot (1') from the property line within the street or thoroughfare right-of-way and shall extend along the street frontage including the side of corner lots and block ends. Alternate sidewalk designs may be considered and shall be approved on a case-by-case basis by the city.

(2)     Construction of sidewalks adjacent to curb in residential areas will be considered where driveway entrances are constructed from the rear of lots on each side of the street for the full length of the block or where mountable curbs are installed. In these instances, the sidewalks shall be five feet (5') wide.

(3)     Sidewalks in commercial areas shall be a minimum width of six feet (6') or extend from the back of the curb to the building line as required by the city.

(4)     Sidewalks in industrial areas and planned developments will be as required by the city.

(5)     All concrete for sidewalks shall be placed on a two-inch (2") sand cushion.

(6)     Longitudinal slope of sidewalks shall be that of the curb adjacent to the sidewalk. The longitudinal slope of the sidewalk shall be one-fourth inch (1/4") per foot starting at the back of the curb. The maximum ground slope from the back of the curb to the property line shall not exceed six percent (6%). If it does exceed six percent (6%), a retaining wall, that is acceptable to the city, shall be provided on the property line or the private property graded to a 3:1 maximum slope.

(d)     Drainage and Storm Sewer Improvements.

(1)     General. Drainage facilities shall be provided and constructed by the developer in accordance with all city standards and the following basic requirements. If development utilizes residential/estate street section and is located within the ETJ of the City of OLD RIVER-WINFREE at the time improvements are constructed, the developer’s engineer shall follow the current CHAMBERS County Subdivision Rules and Regulations as outlined in section VIII - chapter IV titled “drainage-design.”

(2)     Runoff Calculations.

(A)     The selection of which method to use for calculating runoff depends upon the size of the contributing drainage area at the most downstream point of the project. The “rational method” is acceptable for designing projects in which the drainage area is less than two hundred (200) acres. A unit hydrograph method is required for projects with larger drainage areas.

(B)     No matter which method is used to calculate runoff, a developer or builder of property greater than one (1) acre in size, or any property that was platted as a part of an overall tract which was greater than one (1) acre in size (including churches and schools), shall develop the property so that the rate of runoff created by the development as it leaves the property does not exceed the rate of runoff that would have been created if the property had developed as a single-family residential property.

(C)     Runoff computations shall be based upon fully developed watershed conditions in accordance with the land use projections in the latest master plan. The design engineer shall size drainage facilities by disregarding the detention effects of upstream property and calculating the runoff as if the off-site property was developed without any detention. If an approved regional detention/retention facility is in operation, the design engineer may size downstream drainage facilities based on consideration of the detention effects of the regional facility.

(D)     Procedure for drainage areas less than two hundred (200) acres:

(i)     Computation of storm water runoff for drainage areas less than two hundred (200) acres shall be by the “rational method,” which is based on the principle that the maximum rate of runoff from a given drainage area for an assumed rainfall intensity occurs when all parts of the area are contributing to the flow at the point of discharge. The formula for calculation of runoff by the “rational method” is:

Q = CIA

Where: Q = the maximum rate of discharge, expressed in cubic feet per second.

C = Coefficient of runoff.

|  |  |
| --- | --- |
| Park areas - No developed land | 0.30 |
| Developed Park sites | 0.40 |
| Single-Family Residential | 0.55 |
| Duplex | 0.60 |
| Multiple Family | 0.70 |
| Schools | 0.70 |
| Churches | 0.70 |
| Neighborhood Commercial | 0.70 |
| Office Commercial | 0.70 |
| Commercial | 0.85 |
| Industrial | 0.85 |

I = Intensity of Runoff in inches per hour (use appendix A - IDF curve).

A = Drainage area in acres.

(ii)     Time of concentration is the longest time, without interruption of flow by detention devices that a drop of water takes to flow from the farthest point of the drainage area to the point of concentration (i.e. the point of design). The time of concentration is composed of the inlet time and the flow time in a conduit or channel to the point of design.

(iii)     When designing inlets and laterals, the time of concentration is equal to the inlet time. The design engineer will compare the above specified inlet times to the actual calculated inlet time by computing the flow time overland and along the gutter to the first inlet. Manning’s equation shall be used to determine flow time to the inlet. The design engineer may use the actual calculated or specified inlet time.

a.     The inlet time shall be ten (10) minutes for property zoned multiple family, churches, schools, local business, central business, commercial, or industrial.

b.     An inlet time of fifteen (15) minutes shall be used for property zoned for parks, cemeteries, agricultural, and single-family residential.

(E)     Procedures for drainage areas greater than two hundred (200) acres:

(i)     For drainage areas in excess of two hundred (200) acres where the use of the “rational method” does not provide reliable results, the use of a unit hydrograph method shall be made. The use of a unit hydrograph calculation will be based upon standard and accepted engineering principles subject to the approval of the city engineer. Acceptable methods include the soil conservation service (SCS) technical release number 55 or the Corps of Engineers HEC-1 models for drainage areas 200 acres or more.

(ii)     The unit hydrograph method shall be based upon fully developed watershed conditions assuming no effects from the small on-site detention facilities for maintaining the rate of runoff as if the property was developed as single-family residential use. The detention effects of large regional detention facilities can be considered in unit hydrograph methods.

(iii)     Circumstances that may require the use of a unit hydrograph method include sizing open channels, reclaiming floodplains, creating lakes, or building other types of drainage-related facilities on major drainage courses. Design engineers of these types of facilities should be aware that the requirement of designing for fully developed watershed conditions will mean that they will have to calculate these fully developed flows instead of using the flows calculated in the Federal Emergency Management Agency’s (FEMA) flood insurance studies for OLD RIVER-WINFREE or CHAMBERS County.

(3)     Design Storm Frequencies. The approved drainage system shall provide for positive overflow at all low points. The term “positive overflow” means that when the inlets do not function properly or when the design capacity of the conduit is exceeded, the excess flow can be conveyed overland along a grassed or paved course. Normally, this would mean along a street or alley, or shall require the dedications of special drainage easements on private property.

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  | | --- | --- | | **Drainage Facility** | **Design Recurrence interval** | | Closed Storm Sewer Systems | 10-year with 100-year positive overflow in streets such that the depth of flow in the street does not exceed the top of curb. | | Closed Storm Sewer Systems and Inlets at Street Low Point or Sag | 100-year with positive overflow | | Culverts and Bridges | 100-year | | Concrete-lined Channels | 100-year | | Earthen Channels | 100-year | |

(4)     Street and Alley Capacity.

(A)     The depth of flow in the streets shall not exceed the top of curb for the 100-year storm.

(B)     The flows created by the 100-year storm shall be contained within the capacity of all paved alleys.

(C)     The first-floor elevations of all residential and other structures shall be set at a minimum elevation of one foot above the top of the street curb elevation or the alley invert, and with positive drainage provided away from the structure. Positive overflow sections shall provide a minimum of 1 foot of freeboard from the overflow invert adjacent to structures and the corresponding first floor elevation of all residential and other structures.

(5)     Inlet Placement and Capacity.

(A)     Storm sewer inlets shall be built along paved streets at such intervals that the depth of flow, based upon the 100-year storm, does not exceed the top of curb. Inlets shall be located as necessary to remove the flow based on a 100-year storm. If in the opinion of the city engineer the flow in the gutters would be excessive using the above design criteria, the storm sewers or inlet locations could be altered to relieve adverse conditions.

(B)     Inlets shall be placed upstream from an intersection whenever possible. At any intersection, only one street shall be crossed with surface drainage and this street shall be the lower classified street. When an alley intersects a street, inlets shall be placed in the alley whenever flow down that alley would cause the capacity of the intersecting street to be exceeded.

(C)     The minimum inlet size shall be five (5) feet. No more than twenty (20) feet of inlet shall be placed along one gutter at any given location. Minimum sizes of laterals shall be 18 inches for use with 5-foot inlets, 21-inch laterals with 10-foot, 15 foot, and drop inlets and 24-inch laterals for 20-foot inlets. Where laterals tie into trunk lines, place the laterals on a 60-degree angle with the trunk line and connect them so that the longitudinal centers intersect.

(6)     Pipe Design Standards.

(A)     Storm sewer conduit shall be sized to flow full. Manning’s equation shall be used to determine the conduit size.

(B)     Minimum and maximum velocities in pipes:

(i)     The minimum velocities in conduit shall be 2.5 feet per second.

(ii)     Maximum velocity in the pipe shall not exceed 12 feet per second.

(iii)     The maximum discharge velocities in the pipe shall also not exceed the permitted velocity of the receiving channel or conduit at the outfall to prevent erosive conditions. The maximum outfall velocity of a conduit in partial flow shall be computed for partial depth and shall not exceed the maximum permissible velocity of the receiving channel unless controlled by an appropriate energy dissipater (e.g. stilling basins, impact basins, riprap protection).

(C)     In general, storm water shall be carried in concrete pipe conduit, but other types of conduit can be used to carry storm water. However, prior permission to use other conduit materials must be obtained from the city engineer.

(D)     Hydraulic gradient:

(i)     Conduits must be sized, and slopes must be set such that runoff flows smoothly down the drainage system. To insure this smooth passage, the hydraulic gradient must be at the proper elevations. The hydraulic grade line shall be established and shown on the plans for all storm sewer design.

(ii)     The hydraulic grade line shall in no case be closer to the surface of the ground or street than one (1) foot.

(iii)     Hydraulic gradient calculations shall account for all head losses that may occur in the storm sewer line. Friction head loss shall be determined by direct application of Manning’s Equation. Minor losses due to turbulence at structures shall be determined using appendix B of this section.

(7)     Culvert Design.

(A)     One (1) foot of freeboard is required between the 100-year water surface elevation and the top of curb elevation. Exceptions must be approved in writing by the city engineer.

(B)     Culverts must be designed using standard methods and engineering judgment. Culverts shall be designed in accordance with the latest edition of the Texas Department of Transportation (TxDOT) Hydraulic Design Manual. Standards of the City of OLD RIVER-WINFREE will take precedence over TxDOT Manual in cases of conflict.

(C)     Culvert hydraulic grade line calculations shall consider both inlet and outlet control.

(D)     Culverts shall be skewed such that impacts due to the flood and normal flow angles of attack on the structure are minimized.

(E)     The maximum velocity through a culvert shall be fifteen (15) feet per second.

(F)     Stream stability shall be assessed when determining the number of barrels, height and width and culvert skew. Potential for scour shall be accounted for in the design.

(8)     Bridges.

(A)     Two (2) feet of freeboard is required between the 100-year water surface elevation and the low chord of the bridge. Exceptions to this requirement must be approved by the city engineer in writing.

(B)     The skew of the bridge piers and abutments shall be oriented as close to the normal or flood direction of flow resulting in an angle of attack as close to 0 degrees as possible.

(C)     Bridges shall be designed using standard methods.

(D)     Stream stability shall be assessed when designing the abutments and interior bents of the bridge. Scour shall be accounted for in the design.

(9)     Channels.

(A)     Open channels are discouraged in urban areas. Open channels may be used instead of an enclosed system when the pipe size, necessary to carry the design storm event, exceeds the capacity of 2 60-inch RCP. Open channels shall not be permitted when 2 60-inch RCP pipes will carry the design flow, unless approved by the city engineer.

(B)     Open channel design criteria:

(i)     Channels may be left in their natural state provided that the channel velocities are 6.0 feet per second or less and that one (1) foot of freeboard is available during the design storm event.

(ii)     If the natural channel is to be replaced by an improved channel, the flow from the 100-year design flood must be contained within the improved channel while allowing for one (1) foot of freeboard.

(iii)     Improved channels shall be trapezoidal shaped and include a lined section if the design velocity is greater than six (6) feet per second. Lining types such as concrete, rock walls and gabions may be used upon approval of the city engineer. The maximum velocity allowed in concrete lined channels is fifteen (15) feet per second.

(iv)     Unless shown to be feasible in a soils report sealed by a licensed professional engineer in the State of Texas and approved by the city engineer, improved channels shall have minimum side slopes of:

a.     Four (4) feet horizontal to one (1) foot vertical for earthen, grassed-lined side slopes.

b.     1.5 feet horizontal to one (1) foot vertical for concrete-lined side slopes in rock.

(v)     Where practicable, all unpaved channels should have enough grade to avoid ponding during backwater flow conditions. A minimum slope of 0.50% is required for earthen channels and swales, except those used as part of a wetlands area.

(vi)     The developer or owner shall use low maintenance vegetation for vegetative cover, as approved by the city engineer prior to planting. The selection of materials shall comply with either the current ground cover listing for North Central Texas furnished through the Texas Agricultural Extension Service.

(C)     Manning’s equation can be used to design channels and determine water surface elevations and velocities when backwater effects are negligible. Channels where backwater effects occur must be designed using models accepted by FEMA.

(D)     All channel sections must consider and account for channel stabilization in their design. This requirement pertains to all sections whether they are left in their natural condition or are modified in any manner. The design of all drainage channels and swales shall assure adequate capacity and minimum maintenance to overcome the result of erosion, silting, sloughing of bends or similar occurrences.

(E)     When performing hydraulic analyses for channel or drainage way design, the starting water surface shall be based on the following criteria:

(i)     When the ratio of the drainage area of the receiving creek (at the confluence location) to the drainage area of the channel or drainage way being designed is 15 or greater, the 10-year water surface of the receiving creek shall be used as the starting water surface for hydraulic design calculations. For creeks where the 10-year water surface is not available, the slope-area method will be used for starting design calculations.

(ii)     When the ratio of the drainage area is less than 15, the 100-year elevation on the receiving creek shall be used as the starting water surface for design calculations.

(10)     Detention Design. Detention/retention facilities shall be designed for the 100-year design flood according to the following criteria:

(A)     Dedicated detention/retention basins shall also include an additional one (1) foot of freeboard and two (2) feet of sediment storage. The volume of runoff storage for drainage areas greater than two hundred (200) acres shall be computed using unit hydrograph procedures. Acceptable unit hydrograph procedures are provided in section XI.B.5 [section 10.106] of this document [article].

For drainage areas less than two hundred (200) acres, the above methods are recommended; however, an approximate routing method based on the rational formula is allowable.

(B)     All detention facilities designed shall consider the timing of the flood peak in the main channel into which the detention facility drains. Delaying the peak from a site in lower portions of a watershed may result in a higher peak on the main channel.

(C)     A detention facility shall have enough gradient to ensure positive drainage to the outlet structures to avoid nuisance conditions such as standing water, odors, insects, and weeds. A minimum slope of 0.50% towards the outlet structure is required for all detention facilities.

(D)     Detention areas in parking lots shall not be:

(i)     In required parking spaces but in extra spaces.

(ii)     Behind speed bumps unless the speed bumps are made with reinforced concrete.

(iii)     Deeper than six (6) inches unless otherwise approved by the city engineer and warning signs shall be posted.

(E)     Drainage easements shall be provided for all regional detention/retention facilities and for other detention/retention facilities where two (2) or more owners are involved.

(F)     Detention facilities shall be designed to empty in less than 24 hours, unless it is also serving as an erosion control facility.

(G)     Detention facilities used as a sediment control device shall meet the following requirements:

(i)     The sediment control facility shall be designed with minimal velocities such that sediment is dropped and not picked up by flows at any time during the storm event;

(ii)     The basin shall be designed with adequate sediment storage area so that sediment removal is not required more than twice a year. Expected removal periods greater than twice a year must be specified in the maintenance plan and approved by the city engineer; and,

(iii)     Sediment control facilities cannot be used to meet detention requirements unless the volume of sediment is included in the calculations for the detention basin design;

(H)     The owner shall maintain detention/retention facilities unless the facilities are dedicated to the City of OLD RIVER-WINFREE. The following measures are required to ensure the facility functions properly:

(i)     Facilities should be mowed at least twice a year to control weeds and discourage woody growth;

(ii)     Debris, litter and accumulated sediment should be removed from detention facilities at least twice a year. Particular attention should be given to removal of debris, litter and sediment around outlet structures; and,

(iii)     Detention basins designed for sediment removal shall be maintained as specified in the maintenance plan and approved by the city with construction plan submittal.

(11)     Flumes. The widespread use of flumes is not recommended. Flumes shall not be permitted when the purpose of a permanent flume is to carry runoff down the sides of earthen channels. A flume may be used to direct overflow runoff along property lines until the runoff can be intercepted by streets or conduits. Flumes crossing sidewalks shall be covered or bridged such as to minimize Residential danger to pedestrians.

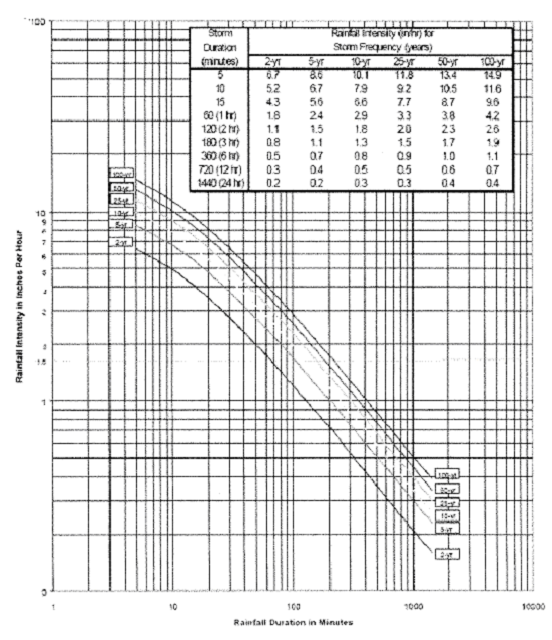
(12)     Grading and Drainage.

(A)     Surface runoff from residential lots shall cross no more than one additional lot before being directed toward the street or a dedicated drainage system. When the flow reaches the second lot, side lot swales shall be in place to direct the flows to the street or to a dedicated city drainage system within an easement in the rear yard. Furthermore, no more than one lot may drain to a second lot before the flow is directed to a street or to a dedicated city drainage system. Where lot to lot drainage occurs, the lot lines shall be aligned, and a dedicated private drainage easement shall be provided.

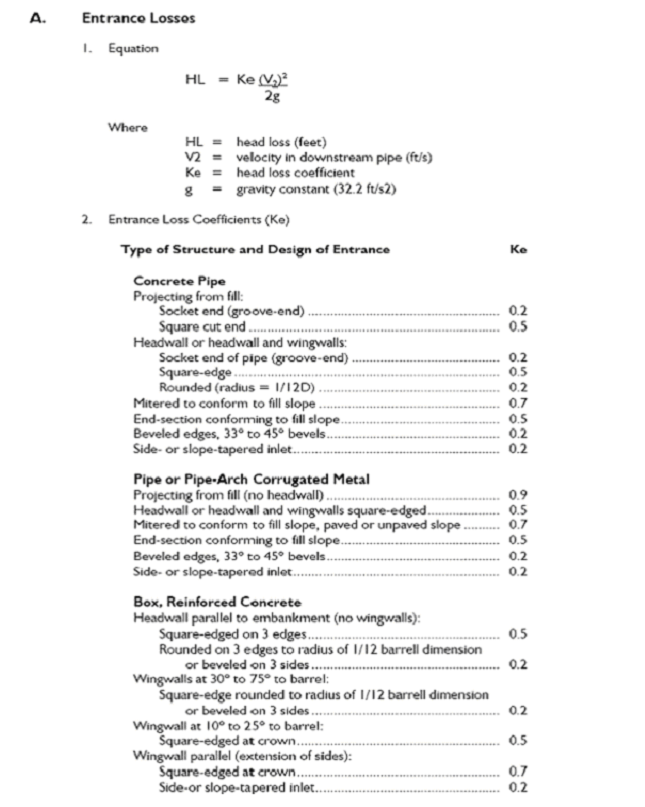
(B)     Three general categories of residential lot grading and drainage plans are anticipated within the City of OLD RIVER-WINFREE as shown in Figure No. 1. Specific deviations from these three plans will be considered on an individual basis.

(C)     When adjacent to the floodplain, the finished floor (FF) elevation of commercial buildings shall be two foot [feet] (2') above the 100-year fully developed based flood elevation (BFE) of the ultimate floodplain. The FF elevation of residential buildings shall be two feet (2') above the 100-year fully developed based flood elevation (BFE).

**Appendix A. Intensity - Duration - Frequency Curve**



**Appendix B. Minor Head Losses**



(e)     Water Systems. Water systems shall be of enough size to furnish adequate domestic water, to furnish fire protection to all lots and shall conform to the city’s comprehensive plan and meet the requirements, in all respects, of the Texas Department of Health. The city shall make the final determination of the adequacy of water mains proposed.

(1)     Materials.

(A)     Water Mains.

(i)     All water mains twelve inches (12") in diameter and smaller may be AWWA C900 polyvinyl chloride (PVC) pipe or an approved equal. Water mains larger than twelve inches (12") in diameter may be constructed with either pre-tensioned or pre-stressed concrete steel cylinder pipe, AWWA C900 polyvinyl chloride (PVC) pipe or an approved equal.

(ii)     The subdivider shall comply with all applicable NCTCOG Standard Specifications, division 2, item 2.12., sections 2.12.5., 2.12.8., and 2.12.20.

(B)     Gate Valves. Gate valves shall be furnished in accordance with the NCTCOG Standard Specifications, division 2, item 2.13., section 2.13.1.

(C)     Fire Hydrants.

(i)     Fire hydrants shall be furnished in accordance with the NCTCOG Standard Specifications, division 2, item 2.14.

(ii)     The subdivider shall furnish drawings with complete detailed dimensions of the fire hydrant proposed for the subdivision.

(2)     Installation and Testing.

(A)     Water Mains, Fittings, Gate Valves and Fire Hydrants.

(i)     The subdivider shall comply with all applicable NCTCOG Standard Specifications in division 6, for installing materials that comply with the standards of the city.

(ii)     Prior to approval of plans and specifications for ductile iron pipe, the subdivider shall perform a soil survey to establish the corrosive characteristics of the soil at, and along, the alignment of the proposed water mains. If the corrosive characteristics of the soil are found to be excessive or indicate a potential for a corrosive condition, then an approved polyethylene encasement or wrapping shall be installed to protect the pipe in accordance with the NCTCOG Standard Specifications, division 2, item 2.9., section 2.9.5.

(iii)     Tap installations on PVC pipe will be made by attaching a bronze service clamp equipped with a sealed threaded port on the periphery of the main; then drilling through the pipe wall to complete each service port. Taps may be made either on an uncharged system or into a main under pressure.

(B)     Location.

(i)     All water mains shall be constructed within street rights-of-way or easements dedicated to the city.

(ii)     Easements shall be provided for water mains which parallel any state numbered highway.

(iii)     Water mains shall be installed in or extended along all frontage streets of the proposed subdivision and shall be connected to all existing water mains where convenient. Provision of water mains in conjunction with cul-de-sac streets shall be at the discretion of the city engineer. To insure reliability of service, dead-end mains of adequate capacity shall not exceed three thousand feet (3,000') in length. Adequate capacity shall be determined by the standards for fire flow as adopted by the city and/or required by the State of Texas whichever is more stringent.

(iv)     In zoning districts commonly referred to as “residential sections,” the minimum size of water main shall be six inches (6") in diameter. Where intervals between “cross-connecting” mains must exceed one thousand two hundred feet (1,200'), or where dead-ends must exist, eight-inch (8") diameter or larger mains shall be installed.

(v)     Eight-inch (8") diameter and larger mains shall be installed in zoning districts commonly referred to as “commercial”, “industrial,” or “multifamily” with minimum size eight-inch (8") diameter intersecting mains every six hundred feet (600') as required by the city. Where dead-ends must exist, eight-inch (8") diameter or larger mains shall be installed. The minimum limits set forth in the above shall not be exceeded except upon the specific approval by the city engineer, city building official and the fire chief, but in no event shall these requirements be less than the minimum required by the city and/or the State of Texas whichever is more stringent

(vi)     All valves buried in the ground shall be provided with cast-iron valve boxes of proper dimensions to fit over the valve bonnets and to extend to such elevation at or slightly above the finished street grade or ground line, as approved by the city. Tops shall be complete with covers marked “water” and shall be adjustable. Valve boxes shall be set vertical and concentric with the valve stem.

Any valve box which has so moved from its original position as to prevent the application of the valve key shall be satisfactorily reset by the developer at his own expense. A reinforced concrete pad of the dimensions, 3'-0" x 3'-0" x 6", shall be poured around all valve boxes that are outside the pavement section, unless otherwise directed by the city.

(vii)     Fire hydrants shall be placed to conform to the requirements as adopted by the city. Each hydrant shall be set upon a slab of stone or concrete not less than four inches (4") thick and not less than one (1) square foot of surface area. Where solid rock exists in the bottom of the trench and same is excavated to the proper depth to form a foundation for the hydrant, the slab of stone or concrete above specified may be omitted.

The hydrant shall be set perpendicular, and to the proper depth, and shall be carefully and substantially blocked against firm trench walls using class 2,000 concrete.

(viii)     Fire hydrants shall be installed and operable prior to the erection of any building in which any combustible material is used as determined by the fire chief.

(f)     Sanitary Sewers. Sanitary sewer facilities shall be furnished and installed to adequately service the subdivision and shall conform to the city’s sanitary sewer plan and meet the requirements, in all respects, of the Texas Commission on Environmental Quality or its successors. The adequacy of the sewerage facilities provided by the subdivider shall be determined by the city.

(1)     Materials.

(A)     Sewer Mains and Appurtenances.

(i)     Sanitary sewer mains may be vitrified clay sewer pipe (extra strength), cement-lined bituminous coated ductile iron pipe, polyethylene-lined ductile iron pipe or polyvinyl chloride (PVC) pipe.

The subdivider shall comply with the applicable Standard Specifications of division 2, which are related to the materials for the sewer mains accepted by the city.

Connections shall be made with a fabricated fitting. Field-glued connections are not allowed. When PVC pipes pass through a manhole wall, asbestos cement sleeves with a rubber ring joint shall be used to provide a positive water-tight connection.

(ii)     The minimum diameter of sewer mains shall be eight inches (8"). Six-inch (6") diameter sewer mains may be acceptable only for short distances (not to exceed 400 feet) and only in locations where the main will not be extended, as approved by the city.

(iii)     Manholes shall be constructed in accordance with the applicable NCTCOG Standard Specifications, division 6, item 6.7., section 6.7.2.(i).

The manholes shall be placed at points of change in alignment, grade, size of sewer, the intersection of sewers; at the right-of-way lines of major and secondary thoroughfares, whether existing or proposed, and the end of all sanitary sewer mains subject to extension.

Maximum manhole spacing for sewers with straight alignment and uniform grades should be determined to assure continuous operation based on available Gleaning equipment. The maximum manhole spacing shall be five hundred feet (500') in all cases.

(iv)     Standard cleanouts shall be constructed at the ends of all sanitary sewers not subject to extension and shall be in accordance with the applicable Standard Specifications, division 6, item 6.7., section 6.7.2(j).

(B)     Lift Stations and Force Main.

(i)     All lift stations shall be designed and constructed with two (2) or more sewage pumps, and the stations shall be capable of pumping the design maximum flow with the largest pump out of service. Detailed layout, projected flows, design data, plans and specifications of the lift station and pumps shall be submitted to the city engineer prior to the purchase and installation of the pumps.

(ii)     All force mains shall be polyvinyl chloride (PVC) or and [an] approved equal, furnished in accordance with the applicable NCTCOG Standard Specifications, division 2.

For the initial flows or at design for average flows, a cleansing velocity of at least two feet (2) per second shall be maintained, with the velocity not to exceed five feet (5) per second at the peak pumping rate. Where high points are necessary in the design of the force main, automatic air relief valves shall be placed at high points in the force main to prevent air locking.

(iii)     The design of the lift station and force main shall comply, in all respects, with the “design criteria for sewerage systems” of the Texas Commission on Environmental Quality (TCEQ) or its successors.

(C)     Location. Wherever possible, sewers shall be in the alleys or easements and shall be a minimum of five feet (5') to six and one-half feet (6-1/2') deep to the invert. Easements shall be provided for sewer mains which parallel any state-numbered highway.

(D)     Installation and Testing.

(i)     All sewers shall be laid in straight alignment where possible with a uniform grade between the manholes. In those cases where horizontal curvature must be utilized to serve a particular area, the minimum radius of curvature shall be one hundred feet (100').

Grades and appurtenances of sanitary sewers shall conform to the requirements of the Texas Commission on Environmental Quality (TCEQ) or its successors and the following are the minimum slopes which should be provided for a velocity of at least two feet (2') per second; however, slopes greater than these are desirable:

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| |  |  | | --- | --- | | **Sanitary Sewer - Diameter** | **Minimum Slope in Feet Per 100 Feet** | | 4 inches (for service lines only) | 1.000 | | 6 inches | 0.500 | | 8 inches | 0.330 | | 10 inches | 0.250 | | 12 inches | 0.200 | | 15 inches | 0.150 | | 18 inches | 0.110 | | 21 inches | 0.090 | | 24 inches | 0.080 | | 27 inches | 0.060 | | 30 inches | 0.055 | | 36 inches | 0.045 | |

(ii)     The excavation, embedment and backfill requirements for the sewer pipe shall all be in accordance with the applicable Standard Specifications, division 6, item 6.2. On non-ferrous pipe, class B+ embedment shall be used per Standard Specifications, division 6, item 6.2.9.(c)(6).

(iii)     Performance tests of the sewer mains, manholes and appurtenances shall be performed and documented by the subdivider in accordance with the procedures and requirements of the Standard Specifications, division 6, item 6.7.

Visual inspection by photographic means (either video or film) shall be required on all sewer mains under the proposed street pavement and shall be performed after completion and acceptance of the street sub grade but prior to the final paving.

Prior to any testing being performed, the subdivider shall submit for approval to the city engineer a full description of the method for testing and the procedures that are to be employed.

(g)     Utility Services.

(1)     All services for utilities shall be installed for each lot in such a manner to eliminate the necessity for disturbing the street and the alley pavement, curb, gutter, sidewalks and drainage structures when connections are made.

(2)     The subdivider shall provide separate service lines for water and sanitary sewerage to each lot or point of metering. The developer shall install separate service lines for each potential business.

(3)     Water service lines shall be in accordance with Standard Specifications, division 6.7., and shall be provided with a corporation stop at the main and a curb stop located at least two feet (2') outside of curb at a depth of not less than one and one-half feet (1-1/2'). All service lines shall be on an individual basis. No bullhead connections allowed.

A meter box, meter yoke and miscellaneous fittings shall be furnished and installed by the subdivider and shall conform to the standard materials currently used by the city.

(4)     Sanitary sewer service lines shall have a minimum diameter of four inches (4") in residential districts and six inches (6") in commercial and industrial districts, shall meet the same requirements for sanitary sewers described above, shall be constructed from the main to the building using wyes and necessary bends, and shall have a minimum cover at the property line of four feet (4'), where possible.

(5)     The subdivider shall place a suitable marker at the point where said service lines are stubbed out so that these lines can be easily located for connection by the city. Suitable markers shall be “W” for water and “S” for sewer stamped in top of curb, or edge of the pavement if no curb is constructed. Letters shall have a minimum height of two inches (2") and a minimum width of two inches (2").

(6)     The subdivider shall make arrangements with all other appropriate utility companies for the extension of their respective utility lines and service, including telephone and cable services, to and within the addition and for any costs or refunds of such costs.

(7)     The use of underground electrical services and transmission lines is required for all subdivisions.

(h)     Street Lighting.

(1)     Street lighting shall conform to the latest edition of the Illuminating Engineering Society Handbook. Aggregate poles with approved fixtures shall be used and lighting levels, as recommended, shall be provided for very light traffic in residential areas, medium traffic on collector streets, and heavy traffic on thoroughfares. In no instance shall the spacing between street lights exceed four hundred feet (400').

(2)     The street lighting plan shall be approved by the city engineer.

(3)     Initial cost of installation of street lighting shall be borne by the subdivider. Street lighting shall not be installed in undeveloped areas, unless monitored and maintained by the developer, until homes/businesses have been occupied within one hundred feet (100') of the light.

(i)     Construction Contracts. The subdivider shall contract for construction of the street, drainage, water and sewer improvements in accordance with the plans and specifications approved by the city.

(j)     Record Drawings (As-Built Plans). The subdivider shall furnish the city engineer one (1) set of reproducible as-built drawings and one electronic copy compatible with the City of OLD RIVER-WINFREE’s CAD system prepared and certified correct by the subdivider’s engineer within thirty (30) days after completion of construction. These as-built drawings shall be twenty-four-inch (24") by thirty-six-inch (36") sheets and shall show complete details of the installation improvements and appurtenances as required by the city, including, but not limited to:

(1)     Plans, profiles and cross sections of all streets and alleys;

(2)     Plans, profiles and cross sections of all drainage projects;

(3)     Locations of water and sewer mains with respect to property lines;

(4)     Size, manufacturer and location with respect to property corners of all water valves and fire hydrants;

(5)     Profiles of sanitary sewers with manhole locations referenced to property corners;

(6)     Detailed diagrams of any special installations such as inlets, junction boxes, headwalls, bores, roadway crossing, siphons and channel crossings;

(7)     The size, materials and locations with respect to property corners of all water and sewer service lines installed;

(8)     Locations and quantities of rock excavation and pavement cut;

(9)     Locations of other utilities encountered;

(10)     Oversize designations (if any) for water and sewer mains; and

(11)     Ground elevation of each lot at the front and rear building lines to be shown on the grading plan.

(k)     Inspection. The subdivider shall provide inspection service through his/her engineer to ensure that construction is being accomplished in accordance with the plans and specifications approved by the city engineer. The subdivider shall notify the city engineer forty-eight (48) hours prior to commencement of construction. This notice shall give the location and date of the start of construction. If the city engineer determines it necessary, he/she shall have the right to inspect any construction work being performed to ensure that it is proceeding in accordance with the intent of the provisions of this article.

(l)     Testing. The city will determine which lab is to be used for testing service, testing services will be arranged and paid for by the owner/developer. It shall be the responsibility of the developer’s engineer to coordinate the scheduling of all required tests with the testing laboratory. Testing shall be conducted in accordance with the procedures set forth in part III of the Standard Specifications for like work at the frequency specified therein or as directed by the city engineer.

(m)     Surveyor’s Certificate. The subdivider shall furnish a certificate, prepared and certified correct by the subdivider’s surveyor, stating that the positions of all monuments and lot markers have been confirmed, or corrected, if necessary, following completion of on-site public improvements to conform to the location of same on the final plat of the development.

(n)     Contract Completion Certificate. The subdivider shall furnish the city a “contract completion certificate” prepared and certified correct by the subdivider’s engineer showing an itemized final statement of all costs, including engineering, related to the construction as required by the city, within ten (10) days after completion of construction, and indicating that all improvements have been completed in accordance with the approved plans and specifications.

(o)     Acceptance. The city’s acceptance of such work shall be by the city’s approval and endorsement of the contract completion certificate. Such acceptance by the city will not be given until satisfactory record drawings have been received by the city.

(p)     Affidavits. The subdivider and the contractor shall furnish the city a subdivider’s payment affidavit stating that all payments due the contractor have been paid and a contractor’s payment affidavit stating that any and all amounts due for labor, materials, supplies, services or claims in conjunction with said construction have been paid in full. These affidavits shall be furnished within thirty (30) days following acceptance of work by the city.

(q)     Compliance by Subdivider. The city shall not be obligated to permit connection of any water or sewer extension to existing system facilities or provide service there from or to reimburse any oversize main cost prior to the full compliance by the subdivider with all the requirements of this article.

**Sec. 10.107     Filing Fees and Charges**

(a)     The schedule of fees and charges shall be paid to the city when any plat is tendered for approval. Each of the fees and charges shall be paid in advance.

(b)     The administrative officials, shall calculate the basic fees and charges for plat review in accordance with the following schedule:

(1)     Residential tract preliminary plat:

$400.00 plus $6.00/lot < 10

$500.00 plus $10.00/lot > 10

$500.00 plus $15.00/acre for plats with lot sizes of one acre or more

(2)     Residential tract final plat or replat:

$400.00 plus $6.00/lot <10

$500.00 plus $10.00/lot >10

$500.00 plus $15.00/acre for plats with lot sizes of one acre or more

$100.00 public notification fee if applicable

(3)     Short form plat or minor plat: $400.00 plus $3.00 each lot, or $15.00 per acre for lots larger than 1 acre.

(4)     Amended plat: $200.00 plus $3.00 per lot.

(5)     Conveyance plat: $200.00 plus $3.00 per lot.

(6)     Vacating plat: $200.00.

(7)     HUD-code manufactured home park preliminary plat: $500.00 plus $6.00 each lot.

(8)     HUD-code manufactured home park final plat: $500.00 plus $6.00 each lot.

(9)     Commercial tract preliminary plat, final plat or replat:

Less than 1 to 4.99 acre tract $500.00 + $15.00 per acre

5.000 to 24.999 acre tract $600.00 ea. plat + $15.00 per acre

25.000 to 99.999 acre tract $950.00 ea. plat

100.00 acre tract and over $950.00 ea. plat + $5.00 per acre

$100.00 public notification fee if applicable.

(10)     Construction plan review:

(A)     Construction plan review fees involving public improvements shall be 1% of the total public improvement construction cost and shall be due at the time of plan approval, or

(B)     In the event that 3rd party review is utilized; the applicant shall be charged 100% of all 3rd party review cost plus an administrative fee of 5% of the total cost of the 3rd party review (minimum $150.00). A $3,000.00 deposit shall be required at the time of plan submittal. If the cost exceeds the $3,000.00 deposit, the remaining balance shall be paid at the time of plan approval. If cost is less than [the] $3,000.00 deposit, a refund will be issued at the time of plan approval.

The appropriate method of determining the civil plan review fee will be decided by staff.

(11)     Public improvement construction inspection fee shall be 3% of the total public improvement construction cost, due prior to the start of construction.

(12)     Plat filing fees for all plats shall be $100.00 due at the time of submission of plat execution package.

**Sec. 10.108     Maintenance Bond or Escrow Account**

The subdivider shall furnish a good and sufficient maintenance bond in the amount of ten percent (10%) of the contract price, or in such amount as approved by the city, with a reputable and solvent corporate surety, in favor of the city, to indemnify the city against any repairs which may become necessary to any part of the construction work performed in connection with the subdivision, arising from defective workmanship or materials used therein, for a full period of two (2) years from the date of final acceptance of the entire project. Final acceptance will be withheld until said maintenance bond is furnished to the city.

(1)     The subdivider may, in lieu of providing a maintenance bond, deposit in an interest-bearing escrow account with a reputable financing institution, an amount equal to ten percent (10%) of the contract price or in such amount as approved by the city.

(2)     This escrowed amount shall be on deposit, in favor of the city, to indemnify the city against any repairs which may become necessary to any part of the construction work performed in connection with the subdivision, arising from defective workmanship or materials used therein, for a full period of two (2) years from the date of final acceptance of the entire project. Final acceptance will be withheld until said escrow account has been established to the satisfaction of the city.

(3)     On such date when the maintenance period expires, the city shall release the escrow account, plus all accrued interest, to the subdivider, less any maintenance or repair costs incurred by the city due to defective workmanship or materials.

**Sec. 10.109     Extension to Extraterritorial Jurisdiction of City**

(a)     The subdivision regulations of the city, as it now exists or may hereafter be amended, is hereby extended to all of the area lying within the extraterritorial jurisdiction of the city, and the rules and regulations within said subdivision regulations governing plats and subdivision of land shall be applicable to such area within said extraterritorial jurisdiction from and after the date of final passage of this ordinance.

(b)     Subdivisions or platting of any tract of land within the extraterritorial jurisdiction of the city shall be regulated by these subdivision regulations.

(c)     Private streets are permitted within the extraterritorial jurisdiction only when each of the following conditions is met:

(1)     At the time a plat is to be filed for recordation, CHAMBERS County has refused to accept the dedication of the associated streets as public streets;

(2)     The city council finds that the property being platted cannot at present be annexed into the city limits, permitting the streets to be dedicated as public streets;

(3)     The city council finds that the proposed private streets have been or shall be constructed to the city’s standards for a public street;

(4)     The city council finds that the proposed private streets shall be maintained by a properly-created property owners association and shall provide adequate easements for public utilities, stormwater drainage, and the exercise of a governmental service or function, including but not limited to fire and police protection, inspection and code enforcement, trash collection, postal delivery, and utility maintenance; and

(5)     The city council finds that the creation of the proposed private streets does not interfere with the orderly development of the area and ability to provide for adequate transportation, utilities, and public services to properties within the plat and the adjacent areas.

**Sec. 10.110     Other Requirements**

(a)     Exceptions. These rules and regulations are the standard requirements of the city. A variance or waiver of any of these rules and regulations may be granted by the city council, upon a showing that there are special circumstances or conditions affecting the property in question and that enforcement of the provisions of this ordinance will deprive the applicant of a substantial property right, and that such variance or waiver, if granted, will not be materially detrimental to the public welfare or injurious to other property rights in the vicinity.

(b)     Penalty. Any person, firm or corporation who shall violate any of the provisions of this article or who shall fail to comply with any provision hereof in the City of OLD RIVER-WINFREE shall be guilty of a class C misdemeanor and be subject to a fine of not more than two hundred dollars ($200.00). Each day that such violation continues shall constitute a separate offense and shall be punishable, accordingly.

(c)     City Required to Advertise for Bids. If any subdivision improvements are eligible for refunds or potential refunds to the subdivider for off-site paving or oversize, border or approach water or sewer mains, the city is required by law to take competitive bids for the work involved. Competitive bids will be taken by the city, and the contract award will be made by the city council in accordance with procedures established by state laws and the ordinances of the city.

Enacted and Ordained \_\_\_\_\_\_\_\_\_\_ day of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, 2021.

Approved and Signed by Mayor Joe Landry Attest: Linda J. Murphy, City Secretary

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