

SUBDIVISION ORDINANCE OF THE CITY OF BENBROOK

A compilation of the regulatory text of Ordinance Number 1203, adopted by the City Council on February 2, 2006, which supersedes Ordinance Number 1122, adopted by the City Council on June 20, 2002, as amended; Ordinance 1231, adopted March 15, 2007; Ordinance 1258, adopted April 17, 2008; Ordinance 1271, adopted September 18, 2008; and Ordinance 1313, adopted December 16, 2010.

December 2010

TABLE OF CONTENTS

CHAPTER 16.04	GENERAL PROVISIONS AND POLICIES	<u>Page</u>
16.04.005	Authority and Jurisdiction	1
16.04.010	Short Title	1
16.04.015	Policy Statements	1
16.04.020	Purpose	1
16.04.025	Interpretation and Conflict	2
16.04.030	Platting Required.....	2
16.04.035	Approval of Plat.....	3
16.04.040	Dedication and Improvements Required; Rough Proportionality; Appeals	3
16.04.045	Parkland Dedication Required	4
16.04.050	Construction; Building Permits; Certificates of Occupancy	7
16.04.055	Acceptance of Dedication	7
16.04.060	Amendments	8
CHAPTER 16.08	DEFINITIONS	
16.08.005	Usage	9
16.08.010	Definitions	9
CHAPTER 16.12	ADMINISTRATION	
16.12.005	Planning and Zoning Commission	18
16.12.010	Planning and Zoning Commission Officers and Duties.....	18
16.12.015	Meetings.....	19
16.12.020	Hearings and Decisions	19
16.12.025	Official Records	20
16.12.030	Duties and Authority of City Manager, City Planner, City Engineer and City Inspector	21
16.12.035	Fees	23
16.12.045	Reconsideration, Appeals and Finality of Decisions	23
16.12.050	Violations, Penalties, and Injunction	23
CHAPTER 16.16	PLAT PROCEDURES, STANDARDS AND SPECIFICATIONS	
16.16.005	General Procedures	25
16.16.010	Classification of Subdivisions.....	25
16.16.015	Procedure Summary	27
16.16.020	Types of Plats; Form and Content	33
16.16.025	Vacating and Amending Plats	47
16.16.030	Signing and Recording of Subdivision Plat	49
16.16.035	Processing of Final Plat and Construction Plans	49
16.16.040	When a Subdivision is a Unit of a Larger Tract.....	50
CHAPTER 16.20	ENGINEERING PLANS AND STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION	
16.20.005	Conceptual iSWM™ Site Plan.....	51
16.20.007	Preliminary iSWM™ Site Plan.....	52
16.20.010	Preliminary Water and Sewer Plan	53
16.20.015	Preliminary Street Plan	53
16.20.017	Preliminary Lot Grading Plan	54
16.20.020	Construction Plans for Public Improvements	54
16.20.025	Other Utilities.....	58

16.20.030	Design Summary.....	58
16.20.035	Standard Specifications for Public Works Construction.....	58
16.20.040	Monumentation and Benchmarks	58
16.20.045	Erosion and Sediment Control	59

CHAPTER 16.24 DEVELOPER’S AGREEMENT, FINANCIAL ASSURANCE AND CONSTRUCTION CONTRACTS FOR PUBLIC IMPROVEMENTS

16.24.005	Procedures.....	60
16.24.010	Performance Bonds, Payment Bonds and Maintenance Bonds	60
16.24.015	Inspections and Approval of Public Improvements	61
16.24.020	Deferral or Waiver of Required Improvements.....	62
16.24.025	Public Construction Contracts.....	62
16.24.030	Private Developer Construction Contract Requirements	62
16.24.035	General Construction Requirements.....	63
16.24.040	Approval of Work.....	63
16.24.045	Ownership and Maintenance of Completed Public Facilities	64
16.24.046	Ownership and Maintenance of Private and Common Area Facilities	64

CHAPTER 16.28 DESIGN STANDARDS AND REQUIREMENTS

16.28.005	General Design Principles.....	65
16.28.010	Preservation of Trees and Native Vegetation	66
16.28.015	Land Unsuitable for Subdivision.....	72
16.28.020	Easements	72
16.28.025	Streets	75
16.28.030	Blocks and Lots.....	95
16.28.035	Drainage.....	97
16.28.040	Water and Sanitary Sewer	101
16.28.045	Street Lights, Other Utilities and Screening Devices	102
16.28.050	Street Tree Requirements	105

**CHAPTER 16.04
GENERAL PROVISIONS AND POLICIES**

16.04.005 AUTHORITY AND JURISDICTION

- A. This Ordinance is adopted under the authority of the constitution and laws of the State of Texas, including particularly Subchapters A and B of Chapter 212 of the Texas Local Government Code and the City Charter of the City of Benbrook.
- B. All land subdivided or platted into lots, blocks and streets within the City of Benbrook, Texas or within its extraterritorial jurisdiction, as provided by State law, shall comply in full with the requirements of this Ordinance. No Plat shall be filed in the office of the County Clerk for a tract within the City or its extraterritorial jurisdiction unless it is approved by the City.

16.04.010 SHORT TITLE

This ordinance shall be known and may be cited as the "Subdivision Ordinance of the City of Benbrook, Texas".

16.04.015 POLICY STATEMENTS

- A. It is the policy of the City of Benbrook that all subdivisions approved under this Ordinance shall be consistent with the Comprehensive Plan, Zoning Ordinance and any other supplemental land use and community development policies that may be adopted by the City Council. No Plat or subdivision of land within the City or its extraterritorial limits shall be approved unless it conforms to such Plans, Policies and Ordinances.
- B. Land to be subdivided shall be of such character that is can be used safely for building purposes without danger to health or peril from fire, flood, or other menace, and land shall not be subdivided until proper provision has been made for drainage, water, sewerage, schools, transportation facilities, and other public improvements.
- C. The existing and proposed public improvements shall conform to and be properly related to the Comprehensive Plan and the capital budget and program of the City, and it is intended that these regulations shall supplement and facilitate the enforcement of the provisions and standards contained in building and housing codes, the Zoning Ordinance, Comprehensive Plan, and capital budget and program of the City.

16.04.020 PURPOSE

It is the purpose of the Subdivision Ordinance of the City of Benbrook to:

- A. provide for the orderly, safe, and healthful development of the area within the City and within the area surrounding the City in accordance with the City's Comprehensive Plan;
- B. promote and protect the health, safety, morals, and general welfare of the community by requiring that adequate streets, drainage facilities, and other public improvements are provided in all subdivisions;
- C. provide for adequate light, air, and privacy, to secure safety from fire, flood, and other danger, and to prevent overcrowding of the land and undue congestion of population;
- D. protect the character and the social and economic stability of all parts of the City and to encourage the orderly and beneficial development of all parts of the City;

- E. protect and conserve the value of land throughout the City and the value of buildings and improvements upon the land, and to minimize the conflicts among the uses of land and buildings;
- F. guide public and private policy and action in order to provide adequate and efficient transportation, water, sewer, drainage, schools, parks and other public requirements and facilities;
- G. insure that public facilities are available and will have a sufficient capacity to serve the proposed subdivision;
- H. prevent the pollution of air, streams, and ponds, to assure the adequacy of drainage facilities, to safeguard the water table, and to encourage the wise use and management of natural resources throughout the City in order to preserve the integrity, stability, and beauty of the community and the value of the land;
- I. preserve the natural beauty and topography of the City and to insure appropriate development with regard to these natural features;
- J. provide for open spaces through the most efficient design and layout of the land, including the use of average density in providing for minimum width and area of lots, while preserving the density of land as established in the Zoning Ordinance of the City of Benbrook;
- K. provide facilities which can be maintained without imposing a burden to the taxpayers; and
- L. provide accurate and complete Plat records for the property within the City, all in accordance with a comprehensive plan.

16.04.025 INTERPRETATION AND CONFLICT

- A. The interpretation and application of the provisions of these regulations shall be held to be the minimum requirements for the promotion of the public health, safety, and general welfare.
- B. Whenever the standards and specifications in this Ordinance conflict with those contained in another Ordinance, the most stringent or restrictive provision shall govern.

16.04.030 PLATTING REQUIRED

- A. Every owner of every tract of land located within the corporate limits or extraterritorial jurisdiction of the City of Benbrook who divides the tract into two or more parts as provided in Chapter 212, Subchapter A and B, of the Local Government Code shall cause a plat to be made by a registered public surveyor which shall accurately describe all of the said tracts by previously platted lot and block number, or by metes and bounds if necessary and locate same as required by this Ordinance.
- B. All platted lots shall meet the minimum frontage required by the Zoning Ordinance onto a paved street meeting the right-of-way and pavement requirements of the Thoroughfare Plan and this Ordinance.
- C. No lot may be sold and no transfer of title to any part of such tract shall be made until a plat meeting the requirements of this ordinance is approved by the City and filed in the Plat Records of Tarrant County, Texas.
- D. No building permit shall be issued on any tract of land until a plat of said tract meeting the requirements of this ordinance is approved by the City and filed in the Plat Records of Tarrant County, Texas.

16.04.035 APPROVAL OF PLAT

- A. No plat shall be filed of record, no lot may be sold and no transfer of title to any part of such tract shall be made, and no tract of land within the corporate limits or extraterritorial jurisdiction of the City of Benbrook shall be improved until a plat shall have been approved by the Planning and Zoning Commission, in accordance with these provisions and Subchapter A or B of Chapter 212 of the Texas Local Government Code, or a Minor Plat that has been approved by City Staff, in accordance with this Ordinance, and filed in the plat records of Tarrant County, Texas.
- B. No plat shall be approved by the Planning and Zoning Commission unless the plat contains a dedication of land for public improvements and public purposes in accordance with the minimum requirements and standards set forth in this ordinance. Every owner of property which shall hereafter be subdivided into two or more parts or platted into a single lot, shall be required to dedicate to the City that portion of such property as is necessary for the orderly development of streets, roadways, thoroughfares, utilities, emergency access, or other public purposes, and such dedication requirements, as imposed, shall be a prerequisite to plat approval.
- C. No plat shall be approved by the Planning and Zoning Commission unless it generally conforms to the Comprehensive Plan and adopted development policies, and unless each lot, block or tract therein fronts upon a dedicated public street, approved private street, or other approved access.

16.04.040 DEDICATION AND IMPROVEMENTS REQUIRED; ROUGH PROPORTIONALITY; APPEALS

- A. Every owner of any tract which is required to be platted as provided herein shall be required to dedicate to the City a reasonable portion of such property as is necessary for the orderly development of streets, roadways, thoroughfares, drainage, utilities, emergency access, or other public purposes, and such dedication requirements as imposed shall be a prerequisite to plat approval.
- B. The developer shall enter into an agreement with the City providing for the installation of streets, paving, curbs, gutters, street lighting, street signs, provision for underground utilities, and drainage facilities in that subdivision in accordance with the standards and provisions of the City Development policies. The developer shall assure construction of the necessary improvements by posting a surety or performance bond or an irrevocable letter of credit for one hundred percent (100%) of the developer's share of construction costs, as approved by the City Manager.
- C. The developer shall enter into an agreement with the Benbrook Water and Sewer Authority for the installation of the water and sewer system in that subdivision in accordance with the Policies and Procedures of the Benbrook Water and Sewer Authority. The developer shall assure construction of the necessary improvements by providing an surety or performance bond for one hundred percent (100%) of the developer's share of construction costs, as approved by the Manager of the Benbrook Water and Sewer Authority.
- D. Prior to a decision by the Planning and Zoning Commission on a preliminary or final plat application for which an exaction is required as a condition of approval, the City Engineer shall prepare a written statement affirming that each exaction requirement to be imposed as a condition of plat approval is roughly proportionate to the exactions required of other developments of a similar nature and extent. In making this determination, the City Engineer may consider:
 - 1. The range of facilities required, per lot, for other developments within the same zoning district, and
 - 2. the adequacy of existing public facilities to serve the proposed development.

The City Engineer may require that the applicant, at its expense, submit any information or studies that may assist in making the proportionality determination.

- E. An applicant for a preliminary or final plat may appeal the requirement for an exaction if the applicant believes that the exaction will result in a disproportionate burden on the applicant in comparison to other development of a like nature and extent.
1. The applicant must file a written appeal with the City Secretary within ten (10) days of the date of the Planning and Zoning Commission hearing. Processing of the plat shall be suspended pending resolution of the appeal and no developer's agreement may be executed until the appeal is resolved.
 2. The City Secretary shall schedule a hearing of the appeal before the City Council at a regularly scheduled City Council meeting approximately 30 days following receipt of the written appeal. One week prior to the scheduled City Council meeting, the applicant shall submit fifteen (15) copies of a study prepared by a registered professional engineer demonstrating that the exaction being required is not roughly proportionate to those required of other development of a similar nature and extent within the City of Benbrook. Such study should also demonstrate that a waiver or modification of the required exaction shall not result in inadequate public facilities to serve the proposed development. The City Engineer shall also submit his findings regarding the need for the required exactions and the basis for his rough proportionality determination.
 3. After holding the hearing and receiving evidence on both sides, the City Council may
 - a. deny the appeal and impose the exaction requirement of the Planning and Zoning Commission,
 - b. grant the appeal and waive in whole or in part an exaction requirement necessary to achieve proportionality, or
 - c. grant the appeal and direct that the City shall participate in the costs of the exaction.The City Council shall make such determination within 30 days of the hearing.
 4. An applicant may appeal the determination of the City Council to a county or district court of Tarrant County within 30 days of the final determination by the City Council.

16.04.045 PARKLAND DEDICATION REQUIRED

A. PURPOSE

1. This section is adopted to provide recreational areas in accordance with the Park and Recreation facilities element of the Benbrook Comprehensive Plan in the form of neighborhood parks as a function of development in the City of Benbrook. It is hereby declared by the City Council that recreational areas in the form of neighborhood parks are necessary and in the public welfare, and that the only adequate procedure to provide the same is by integrating such a requirement into the procedure for planning and developing property for subdivisions in the City.
2. Neighborhood parks are those parks providing for a variety of outdoor recreational opportunities and within convenient distances from a majority of the residences to be served thereby. The park areas established by the City Council and shown on master plan for the City shall be prima facie proof that any park located therein is within such a convenient distance from any residence located therein. The primary cost of neighborhood parks should be borne by the ultimate residential property owners who, by reason of the proximity of their property to such parks, shall be the primary beneficiaries of such facilities. Therefore, the following requirements are adopted to achieve the purposes stated.

B. General Requirements

These requirements shall apply to land zoned residential which is to be used for single-family, duplex and/or apartment residential purposes.

1. Whenever a final plat is filed on record with the County Clerk of Tarrant County for development of a residential area in accordance with the planning and zoning ordinances of the City, such plat shall dedicate an area of land for park purposes, which area shall equal one (1) acre for each one hundred (100) proposed dwelling units. Fee simple title to the parkland shall be conveyed to the City by general warranty deed. Any proposed plat submitted to the City for approval shall show the area proposed to be dedicated. The required dedication may be met by a payment of money in lieu of land when permitted or required by the other provisions of this section.
2. The City Council declares that development of an area smaller than two (2) acres for public park purposes is impractical. Therefore, if fewer than two hundred (200) units are proposed by a plat filed for approval, the developer shall be required to pay the applicable cash in lieu of land amount unless the dedication will increase the size of an existing park.
3. In instances where an area of more than two (2) acres are required to be dedicated, the City Council shall have the right to accept the dedication for approval on the final plat, or to refuse same, after consideration of the recommendation of the Park & Recreation Board and Planning and Zoning Commission, and to require payment of cash in lieu of land, if the City determines that sufficient park area is already in the public domain in the area of the proposed development, or if the recreation potential for that zone would be better served by expanding or improving parks.
4. The dedication required by this section shall be made by filing of the final plat or contemporaneously by separate instrument unless additional dedication is required subsequent to the filing the final plat. If the actual number of completed dwelling units exceed the figure upon which the original dedication was based, such additional dedication shall be required, and shall be made by payment of the cash in lieu of land or by the conveyance of an entire number lot to the City.

C. Money in Lieu of Land Dedication

Subject to approval of the Planning and Zoning Commission, a land owner responsible for dedication under this Section may elect to meet the requirements of Subsection B of this section, in whole or in part by a cash payment in lieu of land made at the time of final plat recording or as stated in the Developer's Agreement. The dedication requirement shall be met by a payment in lieu of land at a per-dwelling unit price set from time to time by resolution by the City Council, sufficient to acquire land and provide for adjacent streets and utilities for a neighborhood park to serve the park zone in which such development is located. The fee assessed per dwelling unit shall be in accordance with Chapter 1.12 of the Benbrook Municipal Code. Cash payments may be used only for acquisition or improvement of a park located within the same planning area as the development, unless the developer executes a waiver and requests that the funds be used for some other park project, in which case the funds may be used for such project. The fee shall be evaluated periodically based on current land values.

D. Park Master Plan Considerations

Land shown on the City's Comprehensive Plan as being suitable for development by the City for a major recreational center, school site, park, or other public use, shall be reserved for a period of one (1) year after the preliminary plat is approved by the City. A failure by the City Council to notify the subdivider of its interest in acquiring the land within the one year period shall constitute a waiver of the right to reserve the land. Any waiver of the right to reserve the land shall no longer be effective if the preliminary plat expires without adoption of a final plat.

E. Special Fund, Right to Refund

1. There is hereby established a special fund for the deposit of all sums paid in lieu of land dedication under this Section or any preceding ordinance, which fund shall be known as the Park Land Dedication Fund.
2. The City shall account for all sums paid in lieu of land dedication under this Section with reference to the individual plats involved. Any funds paid for such purposes must be expended by the City within ten (10) years from the date received by the City for acquisition or development of a neighborhood park as defined herein. Such funds shall be considered to be spent on a first in, first out basis. If not so expended, the owners of the property on the 1st day of such period shall be entitled to a pro rata refund of such sum, computed on a per dwelling unit basis. The owners of such property must request such refund within one (1) year of entitlement, in writing, or such right shall be barred.

F. Additional Requirements, Definitions for Neighborhood Parks

1. Any land dedicated to the City under this Section must be suitable for park and recreation uses. The following characteristics of a proposed area are generally unsuitable (unless recommended in the Comprehensive Plan):
 - a) Any area primarily located in the 100-year floodplain.
 - b) Any areas of unusual topography or slope which renders same unusable for recreational activities.

The above characteristics of a parkland dedication area may be grounds for refusal of any preliminary or final plat.

2. Drainage areas may be accepted as a part of a neighborhood park if the entire floodplain width is dedicated to the City and if no significant area of the park is cut off from access by such channel. If land is dedicated which is in the floodway fringe but not including the floodway, then it shall count as one-half (½) of the requirement as set forth in Paragraph B.1 above.
3. Each park shall have ready access to an improved public street.
4. Unless provided otherwise herein, an action by the City shall be by the City's Planning and Zoning Commission.
5. All parkland dedication shall be consistent with the standards as set forth in the Comprehensive Plan.

G. Credit for Private Parks

If a developer desires to incorporate private park, recreation or open space areas or amenities within their development, they may request limited credit for these facilities against their public open space requirements. A developer may request credit for any private park, recreation or open space area, but such private park, recreation or open space amenities may never satisfy more than 50 percent of the total park and open space dedication requirement of this ordinance.

H. Appeals

Decisions of the City Planner in the implementation of this policy may be appealed to the Planning and Zoning Commission, and decisions of the Planning & Zoning Commission may be appealed to the City Council. The standard for review of decisions shall be whether the decision rendered was clearly unreasonable, arbitrary or capricious and therefore constituted a clear abuse of discretion.

16.04.050 CONSTRUCTION; BUILDING PERMITS; CERTIFICATES OF OCCUPANCY

- A. The City shall not recommend approval of a septic tank permit by Tarrant County for the installation of septic tanks upon any lot in a subdivision or upon any tract of land for which a Final Plat has not been approved and filed for record, or upon any lot in a subdivision in which the standards contained herein or referred to herein have not been complied with in full.
- B. No building, repair, plumbing, mechanical, or electrical permit shall be issued by the City for any structure on a lot in a subdivision or upon any tract of land for which a Final Plat has not been approved and filed for record, nor for any structure on a lot within a subdivision in which the standards contained herein or referred to herein have not been complied with in full.
- C. No application for a building permit shall be considered for approval by any City official until the developer has entered into an agreement providing for the installation of water, sewer, streets, paving, curbs, gutters, utilities, and drainage facilities in that subdivision in accordance with such provisions and standards of the City. Assurances of such installation within a set time limit will be provided by the making of cash or corporate surety bond or depositing money in escrow as provided by City Development Policies.
- D. The City shall not repair, maintain, install or provide any streets or public utility services in any subdivision for which a Final Plat has not been approved and filed for record, nor in which the standards contained herein or referred to herein have not been complied with in full.
- E. The City shall not permit the sale or supply any water, gas, electricity, or sewerage service to a lot within a subdivision or to any tract of land for which a Final Plat has not been approved and filed for record, nor in which the standards contained herein or referred to herein have not been complied in full. Nothing contained herein shall be construed to prohibit maintenance of existing service except where, in the determination of the Director of Community Development, a public health and safety hazard exists.
- F. Any land which, in its natural state, is subject to a one hundred (100) year flood or which cannot be properly drained shall not be subdivided, re-subdivided, or developed until it is demonstrated to the satisfaction of the Planning and Zoning Commission that the construction of specific improvements proposed by the developer can be expected to yield a usable building site.
- G. No building permit, certificate of occupancy or "power-on" approval shall be granted for any building occupied by a single business that crosses a lot or property line, until the property is replatted into a single lot.
- H. No construction of any public improvements shall be initiated by the developer/owner until, (1) a final plat has been approved by the City; (2) a Subdivider's Agreement has been approved by the City; (3) all performance and maintenance bonds, or their equivalent, have been provided to the City; (4) all inspection and permit fees have been paid; and (5) a Notice to proceed is issued by the City.

16.04.055 ACCEPTANCE OF DEDICATION

Any dedication of streets, utilities, easements, public areas, parks or other land shown on a plat shall be deemed to be an offer of dedication which may be withdrawn by the subdivider/owner at any time prior to filing of the plat in the deed records. Withdrawal of any such dedication shall void any previous approval of the plat. Approval of a plat by the Planning and Zoning Commission shall not be deemed an acceptance of any

proposed dedication and shall not impose any duty on the City concerning the improvements or maintenance of such dedication until the developer has actually improved same and the City has accepted and made use thereof.

- A. For any subdivision for which a plat has been filed for record, or where land has been divided by metes and bounds and no plat filed for record, and which has not been approved according to these regulations, or which fails to meet the standards contained or referred to herein, the Commission shall adopt a Resolution concerning such failures or lack of approval and indicating that same is in violation of the provisions of this Ordinance. The Commission shall cause a copy of such resolution, signed by the chairman of the Commission and attested to and notarized by the City Secretary or designee, to be filed in the Deed Records of Tarrant County.
- B. If compliance and approval are secured following the filing of said Resolution, the Commission shall file in the Deed Records of Tarrant County an instrument that, in effect, rescinds such earlier filed resolution.
- C. Disapproval of a plat by the Commission shall be deemed a refusal by the City to accept the offered dedications shown thereon. Approval of a plat shall not impose any duty upon the City concerning the maintenance or improvement of any such dedicated parts until the proper authorities of the City have actually appropriated the same by entry, use, or improvement. Any such dedication, before or after actual appropriation may be vacated by the Council in any manner provided by law.

16.04.060 AMENDMENTS

The City Council may from time to time amend this Ordinance, in accordance with appropriate procedures provided by law.

CHAPTER 16.08 DEFINITIONS

16.08.005 USAGE

The following words and phrases when used in these Rules, Regulations and Procedures have the meaning respectively ascribed to them in this Section unless a different meaning is plainly required by the context clearly indicates to the contrary, words used in the present tense include the future tense; words used in the plural number include the singular; the work "herein" means "in these Rules, Regulations and Procedures". A "person" includes a corporation, a partnership, and an incorporated association of persons such as a club; a "building" includes a "structure"; a "building" or "structure" include any part thereof; "used" or "occupied" as applied to any land or building shall be construed to include the words "intended, arranged, or designated to used or occupied". Any office referred to in these Rules, Regulations and Procedures by title means the person employed or appointed by the City in the position, or their duly authorized representative. Definitions not expressly prescribed herein are to be construed in accordance with customary usage in municipal planning and engineering practices.

16.08.010 DEFINITIONS

Access – Adequate access is defined as having frontage on a paved road meeting the right-of-way and pavement dimensions set forth in the Official Thoroughfare Plan.

Access Easement – An easement across a lot, or lots, providing vehicular access to adjoining lots and/or a public street. Access easements shall include emergency access and fire lanes when such access is required.

Access Controller – The facility controlling vehicular access to private street developments that may be a mechanism or a manned structure.

Acreage, Gross – The total acreage of a subdivision, including areas dedicated to the public use such as street and alley rights-of-way.

Acreage, Net – The total acreage of a subdivision less those areas dedicated to public use such as street and alley rights-of-way. Easements, however, shall be included in net acreage calculations.

Administrative Officers – Any office referred to in this Ordinance by title, i.e., Mayor, City Attorney, City Secretary, City Engineer, City Planner, etc., shall be the person so retained in this position by the City, or their duly authorized representative.

Alley – A minor public right-of-way, not intended to provide the primary means of access to abutting lots, which is primarily for vehicular service access to the back or sides of lots or properties otherwise abutting on a street.

Applicant – The owner of land proposed to be subdivided, or his representative when written consent is obtained from the legal owner of the premises. The terms "applicant", "developer", and "subdivider" are used interchangeably in these Rules, Regulations and Procedures.

Arterial – See Street, Arterial

Authorized Agent – A person empowered by another by notarized statement or Power of Attorney to represent, act for and transact business with the City.

Benbrook Water Authority (BWA) – The water control and improvement district created under the laws of the State of Texas for the purpose of supplying water and sewage service within the corporate limits of the City of Benbrook.

Benchmark, Elevation – A permanent benchmark that identifies the vertical elevation above mean sea level or other approved level.

Block – An area enclosed by streets and occupied by or intended for buildings; or if said word is used as a term for measurement, it shall mean the distance along a side of a street between the nearest two streets which intersect said street on the said side. When necessary, the City Planner shall determine the outline of the block in cases where platting is incomplete or disconnected.

Bond – Any form of security including a cash deposit, surety bond, collateral, property, or instrument of credit in an amount and form satisfactory to the City. All bonds shall be approved by the City Attorney wherever a bond is required by the Subdivision Ordinance or these Rules, Regulations and Procedures.

Building – Any structure built for the support, shelter, and/or enclosure of persons, animals, chattels or moveable property of any kind. When subdivided in a manner sufficient to prevent the spread of fire, each portion so subdivided may be deemed a separate building.

Building Set-Back Line – A line parallel or approximately parallel to the street right-of-way line at a specific distance therefrom marking the minimum distance from the street right-of way line that a building may be erected.

Building Site – Land occupied or to be occupied by a building and its accessory building, and including such open spaces as are required under this Ordinance and having direct access to a public street.

Capital Improvements – Facilities of a permanent nature, such as streets, drainage, sanitary sewer, etc.

City – The City of Benbrook, Texas.

City Council – The City Council of the City of Benbrook, Texas.

City Engineer – The person designated by the City Manager to review engineering aspects of projects located within the City.

City Inspector – The person designated by the City Manager to provide inspection services for public improvements or buildings.

City Manager – The person duly approved by the City Council and charged with the responsibility of administering the City's various departments.

City Planner – The person designated by the City Manager and charged with the responsibility of administering the City's planning and zoning regulations.

Collector Street – See Street, Collector

Commission – Planning and Zoning Commission of the City.

Common Area – An area or facility that is owned jointly by the owners within the subdivision and/or members of the property owners association. Common areas include, but are not limited to, private parks, community buildings, and screening walls.

Comprehensive Plan – The Comprehensive Plan of the City of Benbrook, Texas, as adopted by the City Council of the City of Benbrook, Texas.

Connectivity Index – The number of street links divided by the number of nodes or link ends (including cul-de-sac heads). In calculating the index, nodes connecting the subdivision streets to the external street network may be excluded.

Construction Plans – The maps or construction drawings accompanying a subdivision plat that show the specific location and design of all required or proposed improvements to be installed in the subdivision.

Crosswalk – A public right-of-way, four (4) feet or more in width between property lines, which provides pedestrian circulations.

Covenant – An agreement to do or refrain from doing certain acts.

Cul-de-sac – A street having but one outlet to another street, and terminated on the opposite end by a vehicular turn-around.

Dead-end Street – A street, other than a cul-de-sac, with only one outlet.

Dedication – A gift or donation of property or interest in property by the owner to the public.

Density – The number of dwelling units per gross acre of subdivision, excluding any areas that are non-residential in use.

Detention Pond – A pond or impoundment designed to store storm water runoff for controlled release during or immediately following the storm event.

Developer – An individual, partnership, corporation, or governmental entity undertaking the subdivision or improvement of land and other activities covered by the Subdivision Ordinance or the Design Standards and Criteria, including the preparation of a subdivision plat showing the lay out of the land and the public improvements involved therein. The term "developer" is intended to include the term "subdivider" even though personnel in successive stages of a project may vary.

Developer's Agreement – A written contractual agreement between the City and the Developer establishing the terms and conditions for approval and acceptance of the public improvements required for a development.

Drainage Plan – An engineering study evaluating storm water runoff and flows that recommends drainage improvements necessary to comply with design standards adopted by the City.

Dwelling – Any building or portion thereof, which is designed for or used for residential purposes.

Easement – An interest in land granted to the City, to the public generally, and/or to a private or public utility corporation for the purpose of installing and/or maintaining public facilities or utilities.

Easement, Access – An easement created for the purpose of providing vehicular or pedestrian access to a property.

Easement, Drainage – An easement created for the purpose of conveying storm water across property either on the surface or in an underground system. A drainage easement entitles the City to make necessary improvements within the easement to adequately convey storm water.

Emergency – Response by the appropriate City Department to an alarm or call requiring immediate action in the interest of the public health and safety.

Engineer – A person duly authorized under the provisions of the Texas Engineering Registration Act, as heretofore or hereafter amended, to practice the profession of engineering.

Entry turnaround – An opening or other accommodation provided at the entrance to a private street development in order to allow vehicles denied access to re-enter the public street with a forward motion without unduly disturbing other vehicles at the entrance.

Erosion Control – Structural and nonstructural techniques to prevent the erosion and sedimentation of soil from rainfall and/or runoff.

E.T.J. - Extra Territorial Jurisdiction – That property which lies within the Jurisdiction of the City of Benbrook for enforcing subdivision plat regulations.

Exaction – A requirement imposed as a condition for approval of a plat, preliminary plat, building permit, planned development district or other development permit application to :

- (1) dedicate an interest in land for a public infrastructure improvement,
- (2) construct a public infrastructure improvement, or
- (3) pay a fee in lieu of constructing a public infrastructure improvement.

Final Plat – The one official and authentic map of any given subdivision of land prepared from actual field measurement and staking of all identifiable points by a surveyor with the subdivision location references to a survey corner or other established reference and all boundaries, corners and curves of the land division sufficiently described so that they can be reproduced without additional references. Angular measurements and bearings shall be accurate to the nearest tenth of a foot. The Final Plat of any lot, tract, or parcel of land shall be recorded in the Plat Records of Tarrant County, Texas.

Flood Plain – An area identified by the Federal Emergency Management Agency as possibly being flood prone at or below the base flood elevation (100 year flood plain, or one-percent probability flood event). The issuance of building permits for construction of any structure within such flood plain is regulated by a separate specific ordinance governing the safeguards, preventing actions against flooding, types of uses permitted in flood prone areas, etc.

Floodway – The channel of a river or other water course and the adjacent land areas that must be reserved in order to discharge the base flood as defined by the Federal Emergency Management Agency without cumulatively increasing the water surface elevation more than one foot.

Floodway Fringe – The area within the flood plain but outside of the floodway.

Geotechnical Testing – Testing by a qualified professional testing laboratory to determine the engineering characteristics of soil, rock and/or fill material.

Government Employees In Pursuit Of Their Official Duties – A government employee, such as the following, but not necessarily limited to; police, fire, code enforcement, public works, city engineer, planning, building inspections, and other local, county, state, and/or Federal employees; i.e., postal workers, school districts (e.g. school buses), and/or their designee/contractor in the process of addressing functions and activities that relate to the public health, welfare, and safety.

Green belt – An open space area consisting of primarily natural features, that may be located in a floodplain or along a creek channel or be used as a buffer between land uses or be used as an open space linkage between various land uses.

Hike and Bike Trail – A hike and bike trail has a minimum ten foot (10') concrete surface width and is a trail which serves as a linkage for residential access to recreational and educational areas and facilities.

Infrastructure – Facilities needed to sustain manufacturing, residential, commercial and all other land use activities. Infrastructure includes water lines, sewer lines, and other utilities, streets and roads, communications, and public facilities, such as fire stations, parks, schools, and other similar type uses.

iSWM™ – Integrated Storm Water Management Design Manual as published by the North central Texas Council of Governments and adopted by the City of Benbrook.

Land Use Plan – Part of Comprehensive Plan showing future land use.

Landscape Plan – A plan showing the proposed landscape improvements to be made on a site.

Lot – An undivided tract or parcel of land having frontage on a public street, or upon an approved open space, having direct street access, and which is, or in the future may be, offered for sale, conveyance, transfer or improvement; which is designated as a distinct and separate tract, and which is identified by a tract or lot number of symbol in a duly approved subdivision Plat which has been properly approved by the City and filed on record with the County Clerk.

1. **Area, Lot** – The area of the lot shall be the net area of the lot and shall not include portions of streets and alleys.
2. **Lot Depth** – The distance between midpoints of straight lines connecting the foremost points of the side lot line in front and the rearmost points of the side lot lines in the rear (the mean horizontal distance between the front and rear lot line.)
3. **Lot, Double Frontage or Through** – A lot, other than a corner lot, with frontage on more than one street.
4. **Lot, Frontage** – The length of street frontage between property lines.
5. **Lot, Irregular** – Any lot not having equal front or rear lot lines, or equal side lot lines; a lot, the opposite lot lines of which vary in dimension and the corners of which have an angle of either more or less than ninety (90) degrees.
6. **Lot Orientation** – The compass reading for a line drawn from a point midway-between the side lot lines at the required front yard setback to a point midway between the side lot lines at the required rear yard setback.
7. **Lot Width** – The distance between straight lines connecting front and rear lot lines at each side of the lot, measured across the rear of the required front yard, provided, however, that the width between side lot lines at their foremost points (where they intersect with the street line) shall not be less than eighty percent (80%) of the required lot width except in the case of lots on the turning circle of cul-de-sacs, where the eighty percent (80%) requirement shall not apply.

Master Plan – The phrase "Master Plan" shall be the comprehensive plan of the City and adjoining areas as adopted by the City Council and the 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, water, sewer, and other public and private developments and improvements.

Neighborhood Park – See Park, Neighborhood.

Notice to Proceed – A written authorization permitting the developer to proceed with construction of the approved public facilities.

Open Space, Private – Within a subdivision, private open space is private property under common ownership designated for recreational area, private park (for use of property owners within the subdivision), play lot area, plaza area, building setbacks (other than those normally required), and ornamental areas open to the general view within the subdivision. Private open space does not include streets, alleys, utility easements, public parks or required setbacks. Private open space within a specific lot is the area included in any side, rear or front yard or any unoccupied space on the lot that is left open and unobstructed to the sky except for the ordinary

ordinary projections or cornices, eaves or porches.

Open Space, Public – Within a subdivision, public open space is property which has been designated for park land, recreation, or wildlife conservation areas which have been dedicated to, and accepted by, the City of Benbrook or other Federal, State, or Municipal governmental entity.

Owner of Record – Legal owner or owners of the land.

Park – Land dedicated to, or purchased by, the City or other Federal, State, or Municipal governmental entity for the purpose of providing public recreation or open space areas.

Park, Neighborhood – A public park intended to serve the recreation needs of people living or working within a one-half mile radius of the park.

Park, Private – A tract of land presently owned or controlled and used by private or semi-public persons, entities or groups for active or passive recreational purposes.

Party-in-Interest – Authorized agent of the Owner of Record.

Pavement Width – The portion of a street available for vehicular traffic; where curbs are laid, it is the portion from the face of a standard seven inch (7") curb to the face of the opposite curb.

Person – Any individual, association, firm corporation, governmental agency, or political subdivision.

Petition -- A written request.

Phased Development – A plat presented by the developer that proposes that only part of the tract is to be developed; the remainder of the tract to be developed at a later date.

Planned Development – A subdivision that consists of a variety of land use types, incorporating a single or variety of types of residential dwelling units, public open spaces, and common open space and recreational areas, adequate to service the needs of the tract when fully developed and populated, which is to be developed as a single entity, under unified control. In tracts within a single zoning district, the planned development suffix allows for flexibility in subdivision while preserving the overall density.

Planning and Zoning Commission – Same as Commission.

Plat – The map, drawing, chart, or plan showing the exact layout of a subdivision into lots, block, streets, parks, school sites, drainage ways, easements and/or any other element required by this Ordinance which a subdivider shall submit for approval in accordance with this Ordinance.

Policy – A statement or document which has been enacted by the governing body of the City that forms the basis for enacting legislation or making decisions.

Preliminary Plat – A formal document showing the detailed concept of the subdivision, presented with the required accompanying material to the Planning and Zoning Commission for approval. The graphic expression of the proposed overall plan for subdividing, improving and developing a tract shown by superimposing a scale drawing of the proposed land division on a topographic map and showing existing and proposed drainage features and facilities street layout and direction of curb flow, and other pertinent features with notations sufficient to substantially identify the general scope and detail of proposed development.

Private Access Amenity Plan – A detailed plan to be submitted by the applicant that contains all of the key elements for the private access development, including, but not limited to, private access control mechanisms, screening wall(s), signage, and landscaping.

Private Deed Restrictions – Written stipulations which the developer imposes on buyer of property in the subdivision, such as, but not limited to lot size, set back lines, building size, accessory buildings, and permitted land use.

Private Street – A platted street providing limited local traffic circulation among adjacent lots which is privately owned and maintained, contained within a private street lot, and constructed in accordance with the requirements of this Ordinance.

Private Street Lot – A separate lot owned by the property owners association whereupon a private street is constructed.

Property Owners Association – An organization established for the ownership, care, and maintenance of private streets and other private facilities.

Public Facilities – Any facilities authorized or franchised by the City for the public welfare, usually including public utilities, governmental buildings, and public schools.

Public Facilities System – With respect to water, wastewater, roadway, drainage or parks, the facilities owned or operated by or on behalf of the City to provide services to the public, including existing and new developments and subdivisions.

Public Improvements – Facilities such as streets or drainage systems which are dedicated for public use.

Public Infrastructure Improvement – A water, wastewater, roadway, drainage or park facility that is part of one or more of the City's public facilities systems.

Public Open Space Easement – An easement that restricts construction or plantings so that open space and/or sight visibility is maintained.

Public Utility And Storm Sewer Easement – An easement upon a private street not having the same width as the lot which is intended to contain a privately owned and maintained pavement as well as publicly owned and maintained water lines, sanitary sewer lines, storm sewers and such other utility or franchise infrastructure as can be reasonably accommodated.

Replating – Replating is the resubdivision of any part or all of any block or blocks of a previously platted subdivision, addition, lot or tract.

Reserve Strip – A privately owned strip of land, normally one foot in depth, adjacent to a public right-of-way or along the edge of a subdivision with the intent of preventing public access to the subdivision.

Re-subdivision -- A change in an approved or recorded subdivision plat if such change affects any street layout or area reserved thereon for public use, or any lot line.

Retention Pond – A pond or other impoundment designed to store storm water runoff permanently.

Right-of-Way – Lands dedicated to the public for use as a street, alley or crosswalk.

Road Bed Width – Portion of street available for vehicular traffic.

Screening, Vegetative – An area of a least ten feet (10') wide, densely planted (or having equivalent natural growth with approved shrubs or trees at least four feet (4') high at time of planting, of a type that will form a year-round dense screen approximately eight feet (8') high with a minimum height of six feet (6').

Screening, Wall or Fence – An opaque wall or barrier or fence at least six feet (6') high.

Shall, May – The word "shall" is always mandatory. The word "may" is merely "permissive".

Sidewalk – A paved pedestrian way generally located within public street right-of-way, but outside of the roadway, and built in accordance with City specifications.

Sketch Plat – A sketch drawing of initial development ideas superimposed on a topographic map to indicate generally the plan of development and to serve as a working base for noting and incorporating suggestions of the staff, City Engineer, utilities or others who are consulted prior to the preparation of the preliminary plat.

Stacking Area – A setback measured from the public street right-of-way to the access controller.

Steep Slope – Areas that contain slopes over fifteen percent (15%) grade and are characterized by increased run-off and erosion hazards.

Stop Work Order – A written directive issued by a City employee or authorized agent of the City to cease construction activity.

Street – A public right-of-way, however designated on the City's Comprehensive Plan, which provides vehicular access to adjacent land.

1. An **"arterial"** is designed to efficiently carry large volumes of traffic through the City.
2. A **"collector street"** primarily provides circulation within neighborhoods, to carry traffic from local streets to arterials, or to carry traffic through or adjacent to commercial or industrial areas.
3. A **"local street"** is one used primarily for access to abutting residential property.
4. A **"private street"** is a vehicular access way under private ownership and maintenance that has not been dedicated to the City or accepted by the City.
5. **Street, Internal** – Generally any street whose entire width is contained within a development.
6. **Street, Perimeter** – Any street which abuts a development or one whose width lies partly within a development and partly without, unless otherwise defined by the City Engineer.
7. **Street Width** – The word "street width" shall be the shortest distance between the lines which delineate the rights-of-way of a street.

Structure – Anything constructed or erected with a fixed location on the ground, or attached to something having a fixed location on the ground. Among other things, structures include buildings, mobile homes, billboards, and poster panels.

Subdivider – Any person or agent thereof, dividing or proposing to divide land so as to constitute a subdivision as that term is defined herein. In any event, the term "Subdivider" shall be restricted to include only the owner or equitable owner, of land sought to be subdivided.

Subdivider's Agreement – see Developer's Agreement.

Subdivision – A division of any tract of land situated within the corporate limits, or extraterritorial limits, in two or more parts for the purpose of laying out any subdivision of any tract of land or any addition in Benbrook or its extraterritorial jurisdiction, or for laying out suburban lots or building lots, or any lots and streets, alleys, or parts or other portions intended for public use or the use of purchasers or owners of lots fronting thereon or adjacent thereto. Subdivision includes re-subdivision and one-lot plats.

Surety Company – An entity which undertakes to pay money or to do any other act, in event that his principal fails therein and is bound with the principal for the payment of a sum of money, or for the performance of some duty or promise.

Surveyor – A Registered Public Surveyor, as authorized by the State statutes to practice the profession of surveying.

Thoroughfare – The public vehicular infrastructure composed of arterials, collectors, and local streets. See Streets.

Thoroughfare Plan – The officially adopted plan, a part of the Comprehensive Plan that identifies and classifies the existing and proposed thoroughfares in the City.

Tract – An undivided parcel of land having access to a public street which can be subdivided into lots.

Utility Easement – An interest in land granted to the City, to the public generally, and/or to a private utility corporation or public utility district, for installing, maintaining, repairing or enlarging utilities across, over or under private land, together with the right to enter thereon with machinery and vehicles necessary for the installation, maintenance, replacement or enlargement of said utilities at any time.

Vacation – To cancel, rescind, or render an act that has the effect of voiding a subdivision Plat or a portion thereof as public easement, right-of-way or other dedication.

Yard – A required open space, other than a court, unoccupied and unobstructed by any structure or portion of a structure from thirty inches (30") above the general ground level of the graded lot upward, provided, however, that fences, walls, poles, posts, and other customary yard accessories, ornaments, furniture, and roof overhangs not exceeding thirty inches (30"), may be permitted in any yard subject to height limitations and requirements limiting obstructions of visibility.

**CHAPTER 16.12
ADMINISTRATION**

16.12.005 PLANNING AND ZONING COMMISSION

- A. Acknowledgment is hereby made of the prior creation, establishment and enumeration by the Charter of the City of Benbrook of certain powers and responsibilities of the Planning and Zoning Commission, hereinafter referred to as the "Commission". The Commission shall exercise all of the powers of approval or disapproval of plats, vacation of plats, and replats in accordance with state law, the City Charter, this Ordinance, and other Ordinances of the City.
- B. The Commission shall have the following responsibilities:
1. Provide recommendations to the City Council regarding the development, preparation, and maintenance of the Comprehensive Plan, and auxiliary plans and studies.
 2. Make recommendations to the City Council regarding development policies that should be adopted to insure the implementation of the Comprehensive Plan.
 3. Perform other planning duties which may be specifically assigned to the Commission by the City Council.
 4. Approve or disapprove applications regarding platting or subdividing land within the corporate limits of the City of Benbrook and its extraterritorial jurisdiction as follows:
 - a) Review and approve, conditionally approve, or disapprove requests for waivers or deferrals to the subdivision standards.
 - b) Review and approve, conditionally approve, or disapprove of preliminary plat proposals.
 - c) Review and approve, conditionally approve, or disapprove of short form final plats.
 - d) Approve or disapprove of phased development of a subdivision plat
 5. Review and recommend approval or disapproval to City Council of all proposed changes in the zoning map, whether by request of an individual or a change initiated by the City.
 6. Make other determinations and decisions as required of the Commission from time to time by these regulations, or the applicable sections of the Texas Civil Statutes.

16.12.010 PLANNING AND ZONING COMMISSION OFFICERS AND DUTIES

A. Officers

A Chair and Vice-Chair shall be elected annually from among the Commission's membership at the first meeting in November and at such other times as these offices may become vacant. In the absence of both the Chair and Vice-Chair, the Commission shall elect an Acting Chair.

B. Duties

The Chair, or in his/her absence the Vice-Chair, shall preside at all meetings, and shall decide all points of order or procedure. All letters of transmittal from the Commission shall have the signature of the Chair, Vice-Chair or their designated representative.

16.12.015 MEETINGS

A. Agenda

An agenda shall be prepared by the City Planner for each meeting of the Commission.

B. Regular Meeting

Regular meetings shall be held the second Thursday of each month at 7:30 P.M. in the City Council Chambers of the City Hall, unless otherwise determined by the Commission.

C. Special Meetings

Special meetings for any purpose may be held on the call of the Chairman or on request of two or more members and by giving written notice to all members, delivered to Commission members at least forty-eight (48) hours before the meeting, or as may be scheduled by a majority of the Commission at any previous meeting. The time and place of the special meeting shall be determined by the convening authority.

D. Public Meetings

All meetings shall be held in full compliance with the provisions of the State Law, the Charter and Code of the City of Benbrook and this Ordinance. Any party in interest may appear in his behalf or be represented by counsel or agent.

E. Study Sessions

The Commission may be convened as a committee of the whole in the same manner as prescribed for the calling of a special meeting for the purpose of holding a study session, provided that no official business shall be conducted thereat, and a quorum shall not be required. As a matter of course a study session will be scheduled before each regularly scheduled Commission meeting.

16.12.020 HEARINGS AND DECISIONS

A. Public Hearings and Notice

Public notice will be given for replats if required by Section 212.015 of the Local Government Code.

B. Rules of Order

Roberts Rules of Order, latest revision, may be used on all questions of procedure and parliamentary law not covered by this Ordinance.

C. Suspension of Rules

Any provision of these rules not governed by the City Charter, Code or State Law may be temporarily suspended by a two-thirds (2/3) vote of all members of the Commission of which vote shall be entered upon the minutes.

D. Order of Business

The Chair shall call the Commission to order, and the members present and absent shall be recorded. The minutes of any preceding meeting shall be submitted for approval. The public shall be advised of the procedures to be followed in the meeting.

The Commission shall then hear and act upon those proposals scheduled for public hearing, together with any other matters of business, and report as the Commission or City Planner finds to require Commission consideration.

E. Procedures for Hearing of Proposals

1. The Chair shall call each proposal for consideration.
2. The Chair shall allow the applicant to present his proposal and any supporting information and may limit the presentation to a total of ten (10) minutes.
3. The Chair shall afford the Staff an opportunity to call to the attention of the Commission any additional pertinent information.
4. The Chair shall next call on persons present who wish to speak to the proposal and shall direct that they speak in the following order:

- a) Those person in support
- b) Those persons in opposition

A total of fifteen (15) minutes shall be given to each side for testimony unless extended for due cause by the Chair.

5. The Chair shall then call for rebuttal testimony from each side in the following order:

- a) Those persons in support including the applicant
- b) Those persons in opposition

A total of five (5) minutes shall be given to each side for rebuttal testimony unless extended for due cause by the Chair.

F. Motions

A motion may be made by any member other than the presiding officer.

G. Disqualification

1. A member shall disqualify themselves from discussion, debate and voting on any matter whenever they find that they have a personal or monetary interest in the property under appeal, or will be directly affected by the decision of the Commission as defined by State Law or City Ordinance.
2. A member may disqualify themselves from voting whenever any applicant, or their agent, has sought to influence the vote of the member on their application, other than in the public meeting.

16.12.025 OFFICIAL RECORDS

A. Definition – Official Records

The Official records shall be the minutes of the Commission together with all findings, decisions and other official records of the Commission.

B. Recording of Vote

The minutes of the Commission's proceedings shall show the vote of each member or if absent or failing to vote shall indicate that fact.

C. Files – Retention

All matters coming before the Commission shall be filed in the Planning Department in accordance with that department's general file system. At a minimum, records shall be retained in accordance with the City's Record Retention Schedules.

D. Public Record

The official records, filed for Commission action in regular or special meeting, shall be on file in the Planning Department and shall be open to public inspection during customary working hours.

16.12.030 DUTIES AND AUTHORITY OF CITY MANAGER, CITY PLANNER, CITY ENGINEER AND CITY INSPECTOR

A. CITY MANAGER

The City Manager is hereby authorized and directed to promulgate rules, regulations, standards and specifications for the construction, installation, design, location and arrangement of streets, private streets, driveways, visibility triangles, curbs, street lights, street signs, alleys, utility layouts, utility easements, fences and gates for utility easements, sidewalks, fire hydrants, septic tanks, water wells, monuments, screening devices, criteria for drainage easement requirements, drainage facilities, and crosswalk ways. The City Manager shall file same with the City Secretary at least thirty (30) days before they become effective. The City Manager may amend the same from time to time, provided that an amendment must be filed with the City Secretary at least thirty (30) days prior to its effective date. No such rules, regulations, standards and specifications shall conflict with this or any other Ordinance of the City. All such improvements shall be constructed, installed, designed, located and arranged by the subdivider in accordance with such rules, regulations, standards and specifications.

Unless any exception is specifically requested by the City Manager and adopted by the City Council, the City hereby adopts by reference any standards and specifications for the construction, installation, design, location, and arrangement of water supply and water distribution systems and sewerage disposal systems promulgated by the Benbrook Water Authority.

B. CITY PLANNER

The City Planner or designee shall administer the provisions of these regulations and shall:

1. Have the full care, custody and control of the minutes and other official records, shall attend to the correspondence of the Commission, and shall cause to be given notices as are required and in the manner prescribed by statute, Ordinance, these rules of the Commission.
2. Serve as Recording Secretary and shall perform such duties as are necessary to prepare accurate and complete minutes of the Commission's actions.
3. Determine meeting dates in conformance with this Ordinance, and prepare and post agendas for meetings in conformance with the Texas Local Government Code.
4. Provide for publication in the official newspaper and make all written notices that may be required by the Texas Local Government Code and this Ordinance.

5. Receive and file all sketch plats, preliminary plats, and final plats together with applications and fees.
6. Forward copies of the sketch plat, preliminary plat, and/or final plat with supplementary materials as appropriate to the City Engineer, franchised utilities and Commission.
7. Discuss with any subdivider/developer the procedures for the approval of a subdivision plat.
8. Review the sketch plat, classify the subdivision and recommend in writing to the Planning and Zoning Commission any land or park reservation.
9. Present a written report of recommendations as to classification of the subdivision, approval of the sketch plat, report of the Engineering requirements, and other related materials to the Commission at the public meeting.
10. Review all plats to determine compliance with the regulations and any previous plat approvals and conditions.
11. Make other recommendations in writing as required by these regulations or by the Commission or City Council.
12. Minor Revisions or Amendments to Site Plans – Minor revisions or amendments to site plans which comply with all Ordinance and other requirements, do not significantly alter the approved traffic and drainage patterns, and are not perceived to be controversial by the City Staff, may be approved by the Chair without a public hearing or action by the full Commission. The City Planner shall provide a written report of such action to the Commission.

C. CITY ENGINEER

The City Engineer shall be a licensed Engineer, and shall:

1. Review and make recommendations regarding Standard Plat submittals and minor plats where public infrastructure improvements are involved.
2. Review and recommend in writing, approval, conditional approval or disapproval of engineering requirements for the Preliminary Drainage Plan as required on a Preliminary Plat.
3. Review and recommend in writing, approval, conditional approval or disapproval of Engineering and other requirements for the Construction Plans and Calculations.
4. Review and recommend in writing, approval, conditional approval or disapproval of any other related materials as required by the Commission and/or City Council.
5. Issue a Letter of Acceptance of improvements upon satisfactory completion of all work on public improvements required for the subdivision.

D. CITY INSPECTOR

The City Inspector shall:

1. Issue Notice to Proceed for construction, monitor construction, and issue Stop Work orders where necessary.

16.12.035 FEES

Fees for subdivision and development-related applications are codified in Chapter 1.12 of the Benbrook Municipal Code (1985 as amended.) Appropriate fees shall be paid upon submission of plats for consideration to the City. All fees shall be paid prior to application deadlines and shall not be refundable regardless of action taken by City approving authorities. The City Council shall determine and revise the fee schedule as the need arises.

16.12.045 RECONSIDERATION, APPEALS AND FINALITY OF DECISIONS

A. Reconsideration of Preliminary Plats

Any individual or party aggrieved by any action of the Planning and Zoning Commission in the consideration of a Preliminary Plat or Replat may request that the City Council of the City of Benbrook review such action by the Commission. Such request must be submitted in writing to the City Secretary within five (5) business days of such action. The City Council shall then place such request upon a regular Council agenda and provide the protesting party an opportunity for a hearing. The City Council may, at its discretion, review the material submitted to and considered by the Planning and Zoning Commission relative to the disputed issue. At the conclusion of the hearing, the City Council may or may not choose to forward such recommendations to the Planning and Zoning Commission as it deems appropriate. If a recommendation is forwarded to the Planning and Zoning Commission, the contested item will be rescheduled upon the next available Planning and Zoning Commission agenda, and the Planning and Zoning Commission will consider the City Council recommendation and take such action as the Planning and Zoning Commission deems appropriate. Action by the Planning and Zoning Commission following consideration of the Council recommendation will be final and non-appealable.

B. Any subdivider aggrieved by a finding or action of the Commission other than a Preliminary Plat shall appear by filing written Petition in a court of competent jurisdiction within thirty (30) days from the date of such finding or action, and not thereafter.

C. Finality of Decisions

Except for those instances provided under paragraph A above, all decisions of the Planning and Zoning Commission on Plats and subdivisions are final, unless otherwise provided by the City Charter or State law.

16.12.050 VIOLATIONS, PENALTIES, AND INJUNCTION

A. In behalf of the City, the City Attorney shall, when directed by the City Council, institute appropriate action in a court of competent jurisdiction to enforce the provisions of this Ordinance or the standards referred to herein with respect to any violation thereof which occurs within any area subject to all or a part of the provisions of this Ordinance.

B. In addition thereto any abutting owner or lessee or other person prejudicially affected by the violation of the terms of this Ordinance may resort to any court of competent jurisdiction for any writ or writs, or to obtain such relief, either in law or equity, as may be deemed advisable in these premises.

C. If any subdivision exists for which a final plat has not been approved or in which the standards contained herein or referred to herein have not been complied with in full, the City Council shall pass a resolution reciting the facts of such non-compliance and failure to secure final plat approval. The City Secretary or designee shall, when directed by the City Council, cause a certified copy of such resolution under the corporate seal of the City to be filed in the Deed Records of Tarrant County. If full compliance and final plat approval are secured after the filing of such resolution, the City Planner or designee shall forthwith file an instrument, in the Deed Records of Tarrant County stating such.

- D. Any person, firm or corporation who shall violate or cause or permit anyone to violate any of the provisions of this Ordinance shall be guilty of a misdemeanor, and upon conviction therefore shall be fined an amount not to exceed the sum of TWO THOUSAND DOLLARS (\$2,000.00) for each offense relating to fire safety or public health and sanitation, and shall be fined not more than FIVE HUNDRED DOLLARS (\$500.00) for all other offenses. Each day that such violation thereof shall exist is hereby declared to be a distinct and separate offense and punishable as such.

- E. The City shall have and retain the right of injunctive relief against any person, firm or corporation who is in the process of or about to violate any section, paragraph or part of this Ordinance. Such right for injunctive relief shall exist independent of any other penalty provisions of this Ordinance and not in lieu thereof. The right for injunctive relief is essential to the City that it maintain an orderly, properly planned, and properly engineered control over subdivisions thus protecting the health, morals, safety and well being of the citizens and halting any attempt by any person, firm or corporation to inflict temporary or permanent injury on the general public by a failure to comply with the terms of this Ordinance.

**CHAPTER 16.16
PLAT PROCEDURES, STANDARDS, AND SPECIFICATIONS**

16.16.005 GENERAL PROCEDURES

- A. No preliminary or final plat for a subdivision shall be approved by the Planning and Zoning Commission or City Staff and no completed improvements shall be accepted by the City unless they conform to the following standards and specifications:
1. Standard Operating Procedures: The procedures established by this Ordinance , which detail application procedures, filing dates, review, filing fees as set by the Fee Schedule, standards for sketch plats, preliminary plats, final plats, and any accompanying material.
 2. Classification: The classification of subdivisions into Standard Plat, Minor Plat or Replat as established by this Ordinance.
 3. Subdivision Design Criteria and Standards: The Design Standards and Criteria as adopted by the City Manager which detail the requirements regarding the physical appearance and other standards for the subdivision.
 4. Standard Specifications for Construction of Public Improvements: The standards and specifications set by this Ordinance and adopted requirements for the construction of streets, drainage, water and sewer, and other public facilities.
 5. Other Standards: The provisions of the Building Code, and any other City ordinances which are applicable to the particular subdivision.
- B. The applicant should confer with the Planning Staff prior to the preparation of a sketch plat and discuss the procedure for obtaining approval of a subdivision plat and the requirements as to the general layout and arrangement of lots, blocks and streets, and minimum design and construction requirements for streets, storm drainage, sewerage and water improvements.

16.16.010 CLASSIFICATION OF SUBDIVISIONS

Subdivisions shall be classified as Standard Plat, Minor Plat, or Replat by the City Planner at the Sketch Plat stage.

- A. Standard Plat** – Any division of land into two (2) or more lots shall require a Standard Plat, unless the conditions of a Minor Plat are applicable. A Standard Plat requires the submission and approval of a Sketch Plat and Preliminary Plat prior to approval of a Final Plat. The Preliminary Plat requires approval by the Planning and Zoning Commission.
- B. Minor Plat** – To facilitate the Subdivision Plat approval process in those instances (including minor street dedication, easement dedication and replats) where the highly formalized Standard Plat approval procedure is not necessary for an understanding of a given development process or the effects and implications thereof, or for the protection of proximate individual interest, or for the protection and guidance of community interests, or for the protection and guidance of community development as a whole, the Minor Plat subdivision approval procedure may be used when the following conditions have been met:
1. The Minor Plat and supporting information are respectively drawn and compiled in compliance with the Final Plat specifications as hereinafter provided.
 2. The Minor Plat and supporting information and the subdivision they represent are not otherwise in contravention with Chapter 212, Local Government Code.

3. Each lot and block has frontage upon a dedicated and improved street to City specifications, or necessary dedication and improvements are part of the plat.
4. All easements to each block, or lot have been previously granted or are shown on the Plat.
5. The proposed development neither contains nor creates a significant drainage problem, nor is topography a salient development consideration.
6. All utilities required to serve each block, or lot are in place or arrangements to provide same have been made with the appropriate agency.
7. If the subject property is not identifiable by reference to a previously recorded Subdivision Plat and is to be platted as a single tract, the tract shall have street frontage of not less than the minimum specified by the Zoning Ordinance, this Ordinance, or the Design Standards and Criteria.
8. Subject property shall involve a maximum of four (4) lots.
9. Lot width and total lot area vary no more than five percent (5%) less than the equivalent dimensions of abutting lots.
10. Property which has previously had a total of four (4) lots platted from it via the Minor Plat procedure shall not have additional lots platted from it under the Minor Plat procedure.

The Minor Plat requires a Sketch Plat and Final Plat, which is approved by the City Planner.

C. Replat:

1. A replat shall include modification of an existing plat that creates new lots or alters any previously dedicated rights-of-way or easements, as provided in Section 212.014 and 212.015 of the Texas Local Government Code. Any replat that meets the requirements of an amending plat (Section 212.016) including the combination of existing lots, may be processed as a Minor Plat.
2. A change in a plat that does not fall within any of the categories as an amending plan under Section 16.16.025.C and does not meet the conditions for vacation of a plat, is a replat and may be recorded and is controlling over the preceding plat only if the replat:
 - a) is signed and acknowledged by the owners of the property being replatted;
 - b) is approved by the Commission after a public hearing on the matter at which parties in interest and citizens have an opportunity to be heard; and
 - c) does not attempt to amend or remove any covenants or restrictions.
3. If during the preceding five years, any of the area to be replatted was limited by an interim or permanent zoning classification, to a residential use for not more than two residential units per lot; or any lot in the preceding plat was limited by deed restrictions to a residential use for not more than two residential units per lot, the notice and voting requirements of Section 212.015, Local Government Code, are applicable and must be followed.

16.16.015 PROCEDURE SUMMARY

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 effect a subdivision of such land shall conform to the general procedure described as follows:

A. Application Procedures

1. Written Request Required

Every proposal submitted for Commission action shall be made in writing on application forms provided by the City, and shall be accompanied by all prescribed fees, and shall be complete in all respects before being accepted for filing.

2. Filing Deadline

Every proposal shall be filed with the City Planner not later than noon the Wednesday thirty (30) days prior to the regular meeting date of the Commission. When the filing deadline falls on a City holiday, the following workday shall be observed as the filing deadline. Failure to submit a complete application on time will result in the rejection of the application unless undo hardship can be demonstrated.

3. Notice

Public notice of proposals to amend the boundaries of zoning districts or preliminary plats or residential replats as defined in Section 212.015 of the Local Government Code shall be sent, at the minimum, to the applicant and/or his agent and to the owners of all properties laying within two hundred feet (200') of the property in question, as said ownership appears on the last approved City Tax Roll. Notice shall be given in writing deposited in the United States Mail, postage prepaid, not less than fifteen (15) days prior to the date of Commission hearing.

The notice of the hearing shall advise that a specific proposal has been submitted, shall state the date, time and place of hearing, shall state that further information may be obtained relative to the proposal at the office of the City Planner.

4. Submission of Supporting Information

Information supporting a recommendation to approve or disapprove any proposal before the Commission shall be submitted only through the City Planner or to the Commission in a public meeting.

5. Withdrawal of Proposal

When any applicant desires to withdraw any proposal, they may do so by filing a written request to that effect with the City Planner. Such request shall not be effective unless and until approval of the withdrawal by the Commission at the public meeting.

B. Preliminary Conference and Sketch Plat Review

1. **Preliminary Conference:** Prior to the official filing of a Preliminary Plat, the subdivider should consult with and present a proposed plan (Sketch Plat) of subdivision to the City Planner for comments and advice of the procedures, specifications, and standards required by the City for the subdivision of land.

2. **Sketch Plat Review:** Sketch Plat review will normally be accomplished by submission of the Sketch Plat material as described in Section 16.16.020A and a conference with the City

Planner. The City Planner will provide comments identifying compliance or non-compliance with applicable Ordinances and standards, elements of the Comprehensive Plan, and suggestions for improvement in design to either comply with the applicable ordinances and standards or to improve circulation, drainage, or compatibility with adjacent neighborhoods. The applicant should make every effort to comply with the suggested changes or to respond in writing to the City Planner as to why the changes will not be made. These suggestions and responses will be made a part of the Staff report on any future Plat submittal where the discrepancy remains. Waivers from these requirements will require a waiver under the terms of Section 16.24.020. Conflicts with the Comprehensive Plan shall be resolved by requesting an amendment to the Comprehensive Plan before proceeding with the Plat. Appeals on suggested design changes will remain the discretion of the Planning and Zoning Commission. Approval of the Sketch Plat does not constitute acceptance of the subdivision, but is merely a review procedure prior to submittal of the formal Preliminary Plat.

C. Preliminary Plat

The subdivider shall prepare and submit to the City Planning and Zoning Commission a Preliminary Plat of a Standard Plat for its consideration and approval.

D. Final Plat

Upon approval of the preliminary plat by the Planning and Zoning Commission, the subdivider may then prepare a Final Plat of all of the land included in the preliminary plat, or all of the phases when such phases were approved on the preliminary plat, for submission to and approval by the staff. The Final Plat shall be accompanied by required engineering plans.

E. Review of Engineering Plans for Public Improvements

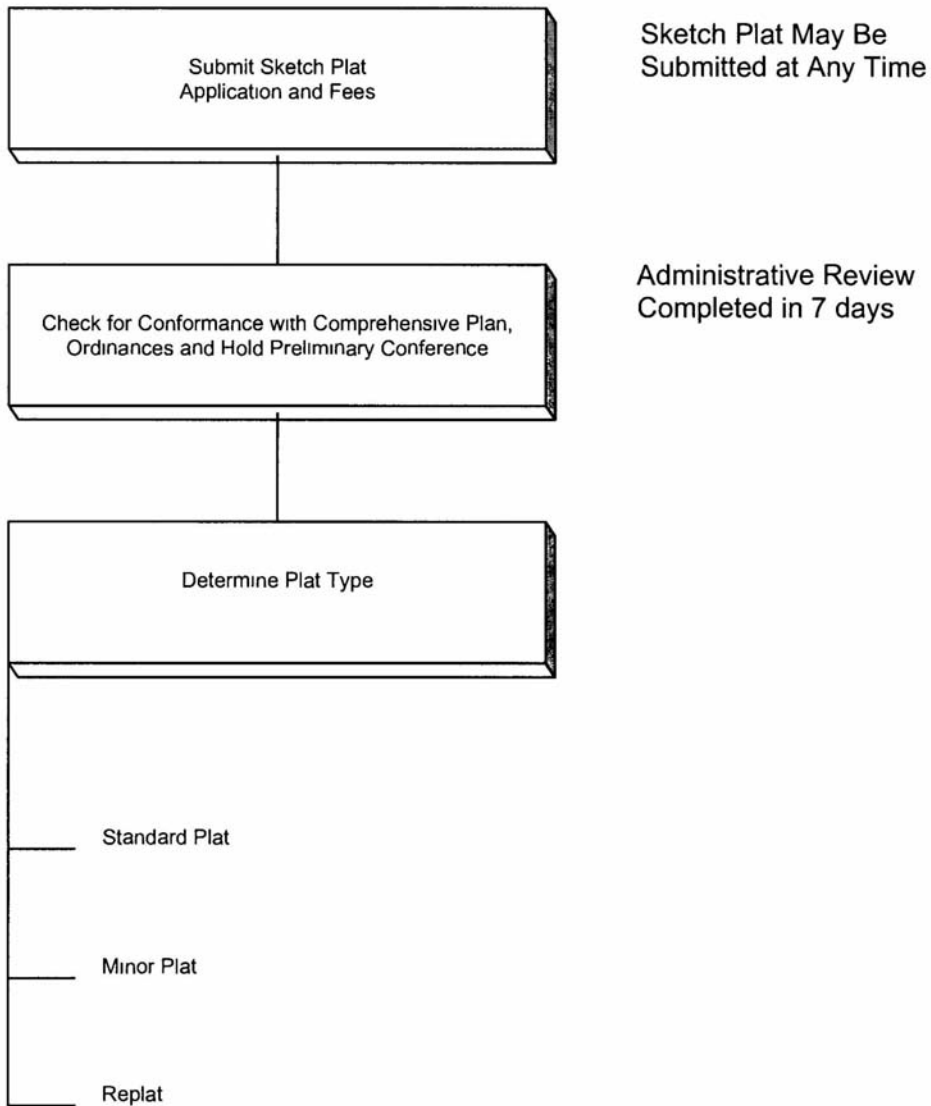
Concurrent with the review of the Final Plat, the City Planner and City Engineer shall review the engineering plans and specifications for all required public improvements for conformance with the City standards. The Final Plat application shall be considered incomplete, and processing suspended, until the engineering plans and financial assurance instruments are approved and accepted.

F. Upon acceptance of such plat and public properties by the Planning and Zoning Commission, the City Planner or designee shall cause such plat to be recorded in the Plat Records of Tarrant County, Texas.

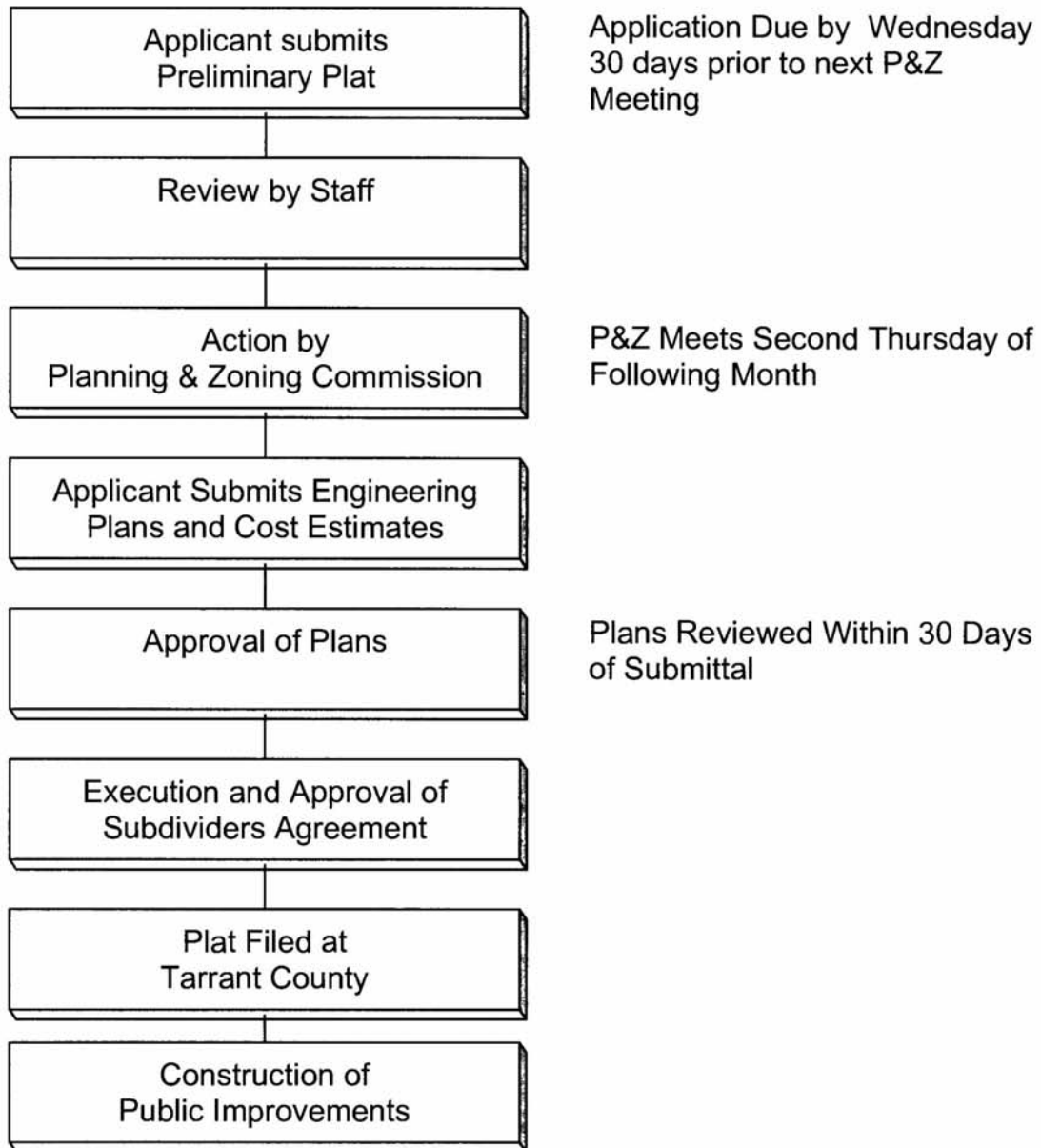
A flow chart indicating the sequence of the steps involved in obtaining approval for subdivision is shown on the following pages.

Subdivision Approval Flow Chart

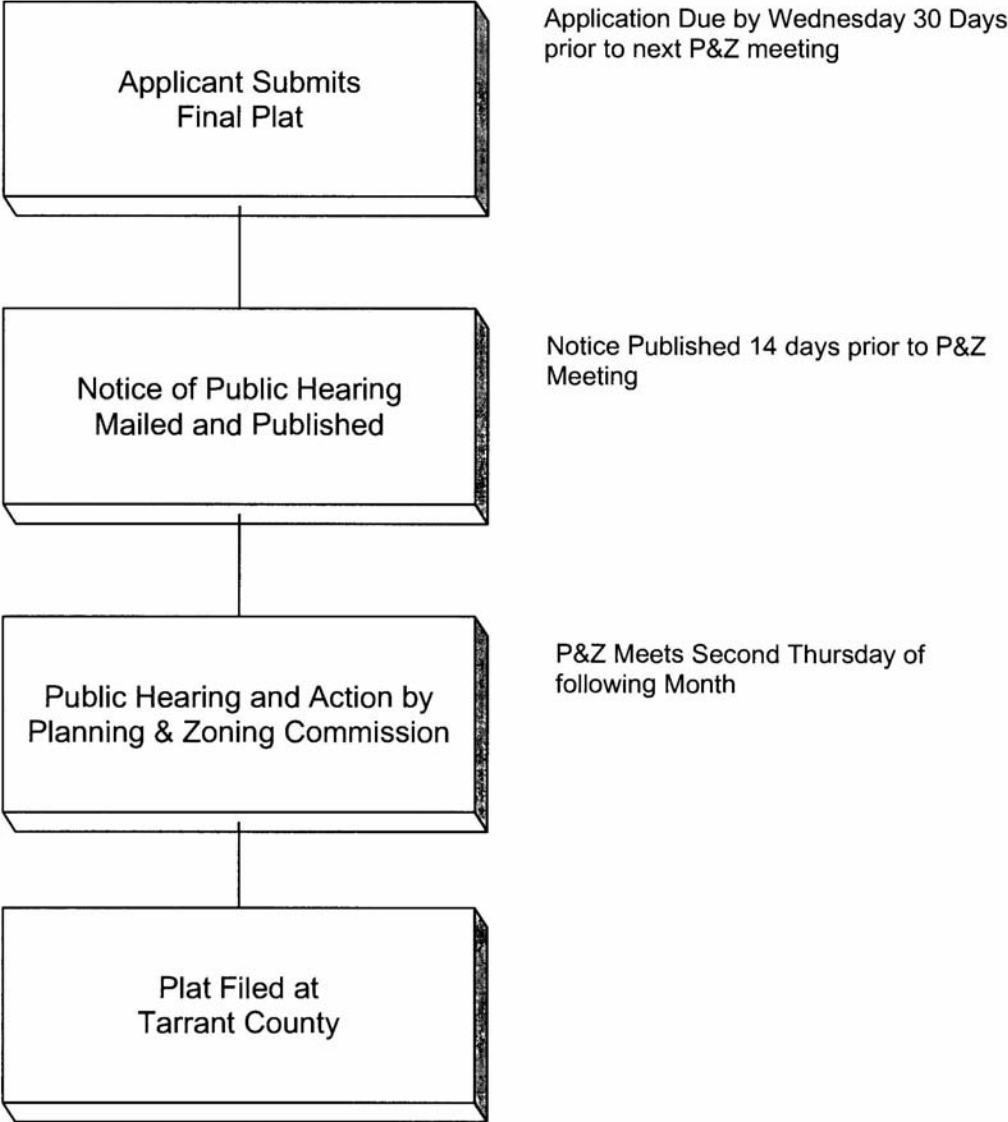
Initial Review and Plat Determination



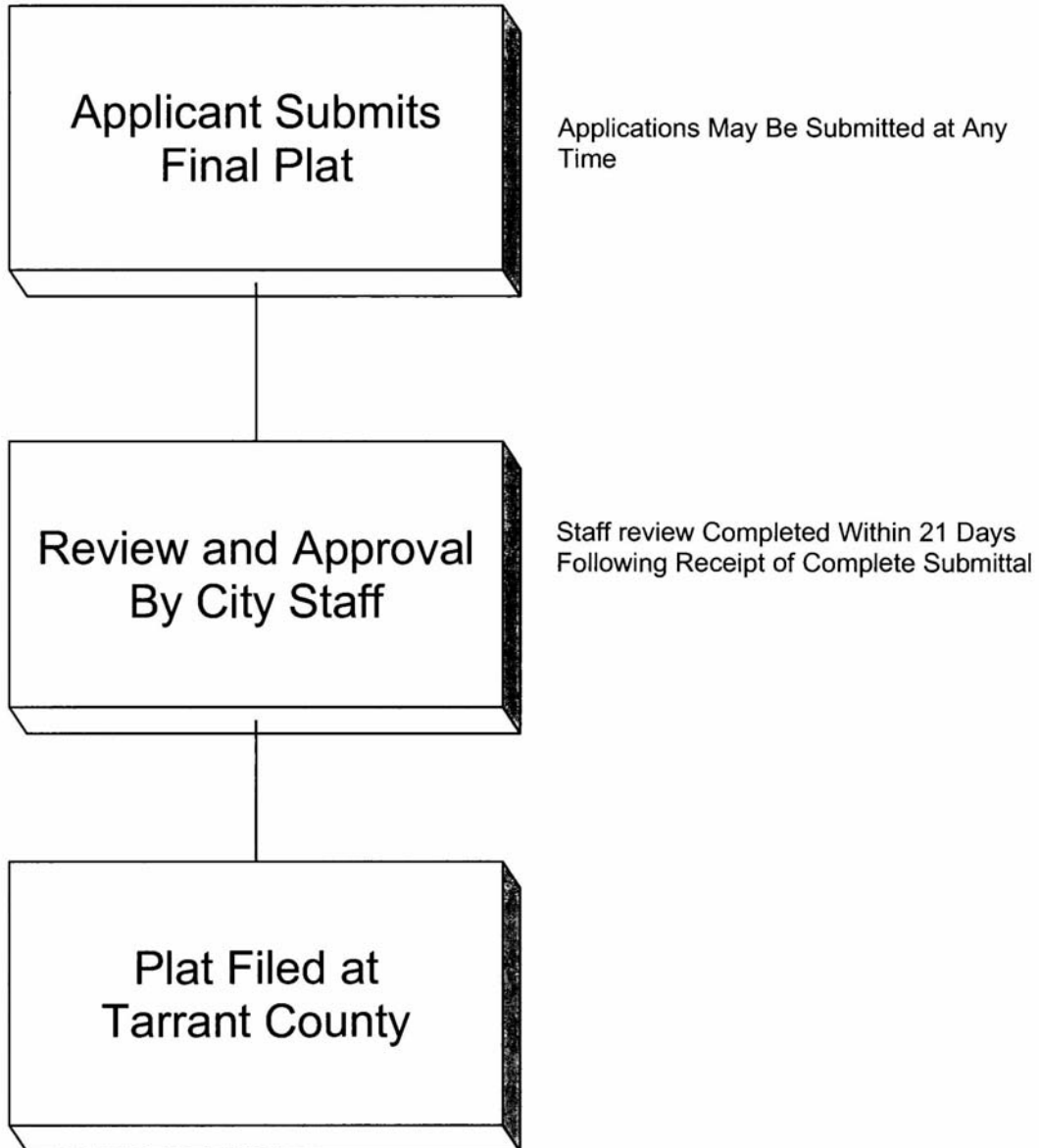
Standard Plat Review Process



Replat Review Process



Minor Plat Review Process



16.16.020 TYPES OF PLATS – FORM AND CONTENT

A. SKETCH PLAT

1. Content

Prior to formal submittal of a Preliminary Plat, or Minor Plat, the applicant shall submit six (6) copies of a Sketch Plat for review by the City Planner. The purpose of the Sketch Plat is to facilitate review and identify necessary details for inclusion in the Preliminary Plat. Sketch Plat review is intended to accommodate the development of land within a minimum of time and with minimal corrections during the Preliminary Plat review. The Sketch Plat may be drawn in pen or pencil to a convenient scale (preferably 1" = 50') on a sheet not larger than twenty-four inches by thirty-six inches (24" x 36"), twenty-two inches by thirty-four inches (22" X 34"), or eighteen inches by twenty-four inches (18" X 24") and shall show the following:

a) Name of the Subdivision:

- (1) Name of the subdivision if property is within an existing subdivision.
- (2) Proposed name if not within a previously platted subdivision. The proposed name shall not duplicate the name of any Plat previously recorded.
- (3) Name of property if no subdivision name has been chosen.

b) Ownership:

- (1) Name, address, and telephone number of legal owner of property and agent for owner, if any.
- (2) Name and address, including telephone number of the surveyor or engineer responsible for preparation of Plat submittal.

c) Description: Location of property by lot, block, or survey abstract and graphic scale, north arrow and date.

d) Features:

- (1) Location of property lines, existing easements, right-of-way, watercourse, and existing wooded areas; location, width, and names of all existing or platted streets or other public ways within or immediately adjacent to the tract.
- (2) Location of significant existing sewers, water mains, culverts, and other underground structures within the tract and immediately adjacent thereto; existing permanent buildings on or immediately adjacent to the site and utility rights-of-way.
- (3) Approximate topography with contours at two-foot (2') intervals suitable to understand general drainage patterns. This may be obtained from previous topographic maps.
- (4) The approximate location and proposed widths of all proposed street right-of-way and pavement.

- (5) Preliminary concept for connection with existing water and sewer system and preliminary concept for collecting and discharging surface water drainage.
 - (6) The approximate location, dimensions, and area of all parcels of land to be set aside for park or other public use, or for common use of property owners in the proposed subdivision.
 - (7) The location of temporary stakes to enable the City Staff to find and appraise features of the Sketch Plat in the field if other landmarks are not present.
 - (8) Whenever the Sketch Plat covers only a part of an applicant's contiguous holdings, the applicant shall submit a sketch of the proposed subdivision area, together with its proposed street system, and an indication of the probable future street and drainage system of the remaining portion of the tract.
 - (9) A vicinity map showing streets and other general development of the surrounding area. The Sketch Plat shall show all zoning district boundaries within and adjacent to the tract, and if proposed to be changed from current boundaries.
 - (10) Floodplain limits as shown on the current Flood Insurance Rate Map.
2. Concurrently with the submittal of the Sketch Plat, the applicant shall also submit three copies of the Conceptual iSWM™ Site Plan, in accordance with the Design Manual for Site Development (Section 1.1.3.5).
 3. Before submitting the sketch plat and conceptual iSWM™ Site Plan, the applicant should discuss with the Planning Staff and City Engineer the procedure set for the adoption of a subdivision plat and the requirements of the "Design Standards," the iSWM™ Design Manual and of any pertinent City ordinances. Planning Staff and City Engineer shall also advise the applicant of existing conditions which may affect the proposed subdivision, such as existing or proposed streets, adjacent subdivisions or properties, floodplain and drainage, sewage, fire protection, reservation of land, and similar matters, referring the applicant to the proper agencies if services are not provided by the City.
 4. No Sketch Plat or Replat shall be accepted for processing if it is determined to be administratively incomplete by the City Planner.
 5. Upon receiving the sketch plat, the City Planner shall classify the subdivision as Standard, Replat, or Minor Plat, review and discuss the plat along with its accompanying reports and other relevant material with the applicant, and shall advise the applicant in writing of the specific changes, if any, required by City ordinance or regulation as a pre-requisite for approval, and any additional changes required.

B. PRELIMINARY PLAT

1. Following submittal and review of the required Sketch Plat, the applicant shall file an application for Preliminary Plat approval on a form provided by the City Planner or designee at least thirty (30) days prior to the Commission meeting at which the plat shall be considered. The Preliminary Plat shall be prepared by a registered surveyor or engineer in accordance with this Ordinance and accompanied by necessary engineering information prepared by a registered engineer. The submission of a Preliminary Plat is necessary to: eliminate the

eliminate the duplication of subdivision names and street names; assure proper alignment of streets and drainage facilities; assure that adequate public utility services will be provided; assure that all necessary permits and plan approvals have or will be applied for, and assure conformance with the Comprehensive Plan and other development regulations..

- 2. Copies Required:** The subdivider shall submit thirty (30) blue or black line copies of the Plat. Accompanying the copies of the Plat, the subdivider shall file a completed Preliminary Plat application along with the prescribed Preliminary Plat fee. A completed Preliminary Plat checklist shall be part of the application. The application shall be accompanied by:
- a) The required review fee for preliminary plats as established by the City Fee Schedule.
 - b) Six (6) blueline or blackline copies of the Preliminary iSWM™ Site Plan, Preliminary Water and Sewer Plan, Preliminary Street Plan and Preliminary Lot Grading Plan.
 - c) Six (6) copies of the Tree Survey and Mitigation Plan.
 - d) Five (5) copies of a traffic impact analysis (if required under Section 16.28.025C)
 - e) A written request for any waivers or deferrals, if necessary, within the subdivision and citing the ordinance provision and section to which a waiver or deferral is being requested.
 - f) If the proposed subdivision constitutes a unit of a larger tract owned by the subdivider, which may be subsequently subdivided as additional units of the same subdivision, a layout of the entire area showing the tentative proposal for streets, blocks, and drainage improvements for such areas.
- 3. Form and Content –** The Preliminary Plat shall be drawn to a scale of one hundred feet (100') to one inch (1") or larger on a sheet not greater than twenty-four inches by thirty-six inches (24" X 36"), twenty-two inches by thirty-four inches (22" X 34"), or eighteen inches by twenty four inches (18" X 24"). An alternate scale may be acceptable upon approval by the City Planner. When more than one sheet is necessary to accommodate the entire area, an index sheet showing the entire subdivision at an appropriate scale shall be attached to the Plat. The Plat shall show the following:
- a) Legal description of property to be subdivided.
 - b) Names and addresses of the subdivider, all record owners, surveyor and engineer. The telephone number of the developer, or his designated representative, surveyor and engineer shall also be provided.
 - c) Proposed name of the subdivision, which shall not have the same spelling as, or be pronounced similar to, the name of any other subdivision located within the City or its extraterritorial jurisdiction.
 - d) Names, recording information and lot patterns of contiguous subdivisions and recording information thereof, and description of contiguous parcels of un-subdivided land. The existing lot patterns, streets, and easements within two hundred feet (200') of the proposed subdivision shall be clearly indicated.
 - e) Subdivision boundary lines, indicated by heavy lines, and the computed acreage of the subdivision.

- f) The location, dimensions, name and description of all existing or recorded streets, alleys, reservations, easements or other public rights-of-way within the subdivision, intersecting or contiguous with its boundaries or forming such boundaries.
- g) The location, dimensions, description and name of all existing or recorded residential lots, parks, public areas, permanent structures and other sites within or contiguous with the subdivision.
- h) The location, dimensions, descriptions, and flow line of existing water courses and drainage structures within the subdivision or on contiguous tracts.
- i) The approximate location of the floodway and the one hundred (100) year flood plain and all lots, or any part of a lot, that lies within the floodway or one hundred (100) year flood plain as shown on the current Flood Insurance Rate Map.
- j) The location, dimensions, descriptions and names of all proposed streets, alleys, drainage structures, parks, open spaces, natural features to be preserved or other public areas; reservations, easements, or other rights-of-way; and, blocks, lots and other sites within the subdivision.
- k) Date of preparation, graphic scale of Plat and north arrow.
- l) Topographical information shall include contour lines on a basis of two (2) vertical feet. Topography shall be tied to vertical controlled benchmarks to be noted on the Plat.
- m) A number or letter identifying each lot or site and each block.
- n) Front building set-back lines on all lots and sites. Side yard building set-back lines at street intersections and access and/or drainage easements.
- o) Location of City Limits line, the outer border of the City's extraterritorial jurisdiction, and zoning district boundaries, if they traverse the subdivision, form part of the boundary of the subdivision or are contiguous to such boundary.
- p) A vicinity map at a small scale which shall show the location of the proposed subdivision within the City, existing subdivisions, streets, parks and public facilities in the general locality of the proposed subdivision. The map shall have a scale and north arrow.
- q) If there is no adjacent subdivision, then a map on a small scale must be presented to show the nearest subdivision in all directions, and how the streets, alleys, or highways in the subdivision submitted may connect with those in the nearest subdivision.
- r) Preliminary Drainage Study: The Preliminary Plat submittal shall be accompanied by six (6) copies of a preliminary iSWM™ site plan prepared in accordance with Section 1.1.3.6 of the iSWM™ Design Manual.
- s) A Preliminary Water and Sewer Plan layout (six copies) showing the location and size of existing and proposed water and sanitary sewer lines and proposed fire hydrant locations prepared in accordance with Section 16.20.010.
- t) A Preliminary Street Plan and Preliminary Lot Grading Plan (six copies) prepared in accordance with Section 16.20.015 and 16.20.017.

- u) Tree and native vegetation survey (six copies) in accordance with Section 16.28.010.
- v) Traffic impact analysis (five copies) when required under Section 16.28.025.C.

4. Processing of Preliminary Plat – Once the deficiencies in the Sketch Plat are resolved or clearly identified as requiring Commission action, the staff will accept the completed Preliminary Plat submittal including all information required in paragraph 3-Form and Content above for formal review, along with the necessary application and fee. Any incomplete submittal shall not be accepted for processing. The City shall coordinate review of the Preliminary Plat with appropriate public agencies and utilities. Formal consideration of the Preliminary Plat will be scheduled for the next regularly scheduled meeting of the Planning and Zoning Commission four (4) weeks following the posted filing deadline.

- a) No Preliminary Plat or Replat shall be accepted for processing if it is determined to be administratively incomplete by the City Planner. The application and fees shall be returned to the applicant until the application is complete.
- b) The City Planner and City Engineer shall make review comments to the Planning and Zoning Commission. The City Planner, or designee, shall make public notice available of the scheduled public hearing as required by State law.
- c) No Preliminary Plat or Preliminary Replat shall be approved unless it is shown to be in compliance with the Comprehensive Plan.
- d) A Preliminary Plat or Preliminary Replat will not be accepted for processing if all or any portion of the land area encompassed within the Plat is included in or directly affected by any proposed amendment to the Comprehensive Plan, if such amendment has been set for formal presentation to the Planning and Zoning Commission or the City Council by placement on a formal agenda.
- e) The Planning and Zoning Commission shall act on a plat within thirty (30) days after the plat is filed. The complete Preliminary Plat submittal including requisite fee shall be considered filed on the application deadline date for the meeting 29 days prior to the Planning and Zoning Commission meeting. A plat that is denied for administrative incompleteness shall not be subject to the thirty (30) day review. The Planning and Zoning Commission shall approve, conditionally approve, or disapprove of the Preliminary Plat.
- f) If a Preliminary Plat is approved by the Commission subject to certain conditions, three (3) copies of a revised Preliminary Plat (including revised grading, drainage, utility, tree survey plan and any other element of the preliminary plat that requires revision) reflecting those conditions shall be submitted to the City Planner within sixty (60) days after approval or the approval lapses unless the applicant demonstrates good cause for delay in submitting the revised Preliminary Plat. The revised Preliminary Plat submittal shall be reviewed by the City Planner and City Engineer for compliance with conditions of Commission approval. Submission of a Final Plat of the total area of a Preliminary Plat within sixty (60) days reflecting the conditions approved shall meet the requirements of this provision.
- g) If a Final Plat is not submitted within two (2) years following Commission approval of a Preliminary Plat, then approval of the Preliminary Plat must be resubmitted and processed according to the terms and provisions on this Ordinance. The two (2) year period for Final Plat submission may be extended up to one additional year upon a majority vote of the Planning and Zoning Commission if a developer demonstrates

demonstrates good cause why the authorization should continue. The submission of a Final Plat application for a portion of a phased development extends authorization of the remaining portion of the Preliminary Plat by an additional two (2) years from filing of the latest Final Plat.

- h) Approval of a Preliminary Plat by the Commission shall be deemed an expression of approval of the layout submitted on the preliminary drawings as a guide to the installation of streets, water, sewer and other required improvements and utilities and to the preparation of the Final Plat. Approval of the Preliminary Plat does not constitute acceptance of the subdivision, but is merely an authorization to proceed with preparation of the Final Plat for record.
- i) No construction, including grading, shall be commenced on the subdivision prior to acceptance of the final plat and the Notice to Proceed is issued by the City Engineer.

C. FINAL PLAT

1. The submission of a Final Plat is necessary to assure proper identification and location of all streets, lots and easements; assure that the streets will be properly constructed and maintained; assure that public utilities systems have been approved; assure that all proper dedications have been made for streets, easements, and public spaces; and, assure that all necessary permits have been obtained or applied for.

2. Application Procedures:

The applicant shall file an application for approval of the Final Plat on forms available at the office of the City Planner or designee. The application shall include the plat and be accompanied by appropriate engineering plans, soils reports, and other necessary information, and the appropriate filing fee. Patching and pasting of paper attachments is not acceptable. All figures and lettering shall be neat and easily legible. For final approval, the Final Plat must comply in all respects with the approved Preliminary Plat.

- a) Standard Plat

Following approval of the Preliminary Plat by the Planning and Zoning Commission, the applicant shall submit a Final Plat Application subject to the following criteria:

- (1) The Final Plat submittal shall include twelve (12) blue or black line copies of the Plat, and two original Dedication Instruments, and shall contain all of the features required for Final Plats in this Section, all necessary easements and all conditions of the Preliminary Plat approval by the Planning and Zoning Commission. The submittal shall include a completed Final Plat Application, the prescribed Final Plat fee, and it shall be accompanied by copies of site improvement data bearing the seal of an engineer and detailed cost estimate as required. The Final Plat Application shall also be accompanied by copies of the final iSWM™ site plan, in accordance with Section 1.1.3.7 of the iSWM Design Manual.
- (2) The Final Plat shall be accompanied by the following:
 - i) The required review and filing fees for Final Plat Approval as set by the City Fee Schedule.
 - ii) One copy of the private deed restrictions, if any, as filed in the records of Tarrant County.

- iii) Three copies of Construction Plans for Public Improvements, as described in Section 16.20.020.
 - iv) A completed form of Performance and/or Surety Bonds or other Surety Funds as prescribed in Section 16.24.010, for submittal to the City Attorney for approval.
 - (3) Upon approval by the City Staff, the applicant shall submit two (2) mylars and two (2) blue-line or blackline paper copies of the revised Final Plat with original seals and signatures in black ink, two (2) original (8-1/2" by 11" or 8-1/2" by 14") executed dedication instruments, tax certificates, groundwater availability certificate (if required), suitable for filing with the County along with recording fees required by the County Clerk.
 - (4) Any applicant aggrieved by a decision or condition imposed by the City Staff may appeal to the Planning and Zoning Commission. In such event, the applicant shall file the number of copies required for a Preliminary Plat, along with a written appeal of the requirement by the City Staff.
- d) Minor Plat
 - (1) Following the review and classification of the sketch plat by the City Planner as a Minor Plat, the applicant shall submit twelve (12) blue-line or blackline copies of the Minor Plat together with dedication instruments and written application for subdivision approval, meeting all requirements as to Form and Content listed below
 - (2) The Final Plat shall be accompanied by the following:
 - i) The required review and filing fees for Final Plat Approval as set by the City Fee Schedule.
 - ii) One copy of the private deed restrictions, if any, as filed in the records of Tarrant County.
 - iii) Three copies of Preliminary Drainage Plan, as described in Section 16.20.005.
 - (3) Upon approval by the City Staff, the applicant shall submit two (2) mylars with original seals and signatures in black ink, two (2) blue-line or blackline paper copies of the revised Final Plat, and two (2) original (8-1/2" by 11" or 8-1/2" by 14") executed dedication instruments, tax certificates, groundwater availability certificate (if required), suitable for filing with the County along with recording fees required by the County Clerk.
 - (4) It shall be the duty of the City Planner having received the Minor Plat, to:
 - i) Check the Minor Plat for completeness and for conformity to the specifications as provided herein.
 - ii) Inform the applicant of the completeness of the Minor Plat and of its conformity to the specifications as provided herein.

- iii) An application shall not be accepted until all materials are considered complete by the City Staff.
 - (5) Conditions for Minor Plat approval by the City Planner shall be as follows:
 - I) The City Planner may approve a Minor Plat involving four or fewer lots fronting on an existing street that does not require the creation of any new street or the extension of municipal facilities that would require the expenditure of City funds.
 - ii) All other Minor Plat requirements are met.
 - iii) The City Planner may, for any reason, present the plat to the Commission for approval and shall refer the plat to the Commission if he or she refuses to approve the plat.
 - (6) The Commission, through its Chair, shall act on a formally accepted Minor Plat within thirty (30) days of the date of acceptance of the Final Plat for processing. If said Plat is not approved, conditionally disapproved or disapproved within thirty (30) days from the date of acceptance, it shall be deemed to have been approved and a certificate, showing said acceptance date and the failure to take action thereon within thirty (30) days from said acceptance date, shall on demand be issued by the Commission and said certificate shall be in lieu of the endorsement herein required.
 - (7) Any applicant aggrieved by a decision or condition imposed by the City Staff may appeal to the Planning and Zoning Commission. In such event, the applicant shall file the number of copies required for a Preliminary Plat, along with a written appeal of the requirement by the City Staff.
- e) Replat
 - (1) Following the review and classification of the Sketch Plat as a Replat by the Planning Staff, the applicant shall file a request on a form provided by the City Planner to appear before the Commission. This request must be filed at least thirty (30) days prior to the Commission meeting at which he wishes to appear. Processing of a Replat shall conform to the requirements of Sections 212.014 and 212.015 of the Texas Local Government Code.
 - (2) The applicant shall submit at least thirty (30) blue-line or black-line copies of a Final Plat meeting all requirements as to Form and Content listed below, at least thirty (30) days prior to the Commission meeting at which he wishes to appear.
 - (3) The Final Plat shall be accompanied by the following:
 - I) The required review and filing fees for Final Plat Approval as set by the City Fee Schedule.
 - ii) One copy of the private deed restrictions, if any, as filed in the records of Tarrant County.
 - iii) Three copies of Preliminary Drainage Plan, as described in Section 16.20.005, if required by the City Engineer.

- iv) Proposed financial assurance instruments for the installation of any required public improvements, in accordance with Chapter 16.24 of this Ordinance.
- (4) The City Planner or designee shall cause the publication of a notice of the public hearing in the official newspaper before the 15th day prior to the hearing and mail written notice of the hearing to all property owners within the original subdivision whose lots are within 200 feet of the proposed Replat.
- (5) Upon approval by the Planning and Zoning Commission, the applicant shall submit two (2) mylars and two (2) blue/line or black/line paper copies of the revised Final Plat reflecting any changes required to meet conditions imposed by the Planning and Zoning Commission, signed and suitable for recording with the County and two (2) (8-1/2" by 11" or 8-1/2" by 14") original executed dedication instruments, tax certificates, groundwater availability certificate (if required), along with recording fees required by the County Clerk.

3. Form and Content:

The Final Plat and accompanying data shall conform to the Preliminary Plat as approved by the Commission incorporating any and all changes, modifications, alterations, corrections and conditions imposed by the Commission. The final plat shall comply in all respects with the approved Preliminary Plat for a Standard Plat or the approved Sketch Plat for a Minor Subdivision, Replat or Minor Plat. The applicant shall submit the Final Plat drawn by a licensed surveyor and shall include the following:

- a) The Final Plat shall be drawn at a scale of one hundred feet (100') to one inch (1'), or larger on a sheet size of twenty-four inches by thirty-six inches (24" x 36"), twenty-two inches by thirty-four inches (22" X 34"), or eighteen inches by twenty-four inches (18" x 24") in accordance with the Tarrant County Clerk specifications for recording. Where more than one (1) sheet is necessary to accommodate the entire area, an index sheet showing the entire subdivision at an appropriate scale shall be attached to the Plat.
- b) Final plats shall contain the firm name, address, and phone number of the surveyor, and the name, address, and phone number of the dedicator. The Final Plat shall contain the following caption to be located near the lower right hand corner of the plat below the title block and in accordance with Tarrant County Clerk requirements, "This plat filed in Instrument No. _____ Date _____". Final plats shall contain all necessary information and be in prescribed format required for recording with the Tarrant County Clerk.
- c) Proposed name under which the subdivision is to be recorded. All subdivisions shall be named and the name approved by the City before the Final Plat is submitted. No subdivision or street name shall be a duplication, either in part or in whole or be similar in spelling or pronunciation to the name of any other subdivision within the City or within any distance outside the City, which might result in confusion to operators of emergency vehicles.
- d) Name and recording information of contiguous subdivisions, location and identification of contiguous lots, and indication of whether contiguous properties are platted and filed of record and names of owners and deed references of all unplatted adjoining properties.

- e) The tract designation and other description according to the real estate records of the county.
- f) The location of all permanent monuments and control points described as to size and material. Primary control points or descriptions, and ties to such control points to which all dimensions, angles, and bearings shall be referred. Such primary control points shall be either a City recorded monument or a USGS monument, if such monument is within 2,000 feet of the proposed subdivision.
- g) A location map of the proposed subdivision showing existing and proposed streets and thoroughfares covering an area of at least one-half (1/2) mile outside the proposed subdivision to adequately indicate the location of the subdivision.
- h) Subdivision boundary lines of the total area proposed for subdivision and the computed acreage of the total area.
- i) Bearing and length or curve data (radius, central angle, chord bearing and distance) of each boundary line shall be shown and description by metes and bounds of the subdivision perimeter shall be placed on the plat. The source of all bearings shall be the Texas State Plane Coordinate System (North Central Zone, 1983 NAD) and shall be noted on the plat. The point of beginning for land in a subdivision described by metes and bounds should be clearly defined on the plat, and any plat shall be clearly related to the survey, tract, or subdivision of which it is a part.
- j) The location, dimensions, description and name of all proposed streets, alleys, drainage structures, parks, other public areas, reservations, easements or other rights-of-way; block, lots, and other sites within the subdivision with accurate dimensions, bearing or deflection angles and radii, arcs, tangents, and central angles of all curves where appropriate.
- k) Each proposed street, within the subdivision area, shall be named and shall conform with names of any existing street of which they may be or become extensions. Extensions of existing streets or roads shall use the name already established. All streets shall be named and the name approved by the City before the Final Plat is submitted. Names of new streets shall not duplicate or cause confusion with the names of existing streets, unless the new streets are a continuation of, or in alignment with existing streets, in which case names of existing streets shall be used. Streets shall be named to provide continuity with existing streets.
- l) The location and dimensions of existing and proposed public utilities easements.
- m) The location and dimensions of existing and proposed storm drainage easements. The limits of the 100-year floodplain shall be shown and encompassed in a dedicated easement. Minimum finished floor elevations at least two feet (2') above the 100-year water surface elevations shall be shown on any lot adjacent to the floodplain, channel, sump inlets or drainage facilities.
- n) The location of proposed blocks, lots, and other sites within the proposed subdivision.
- o) A number shall be used to identify each lot, site or block.
- p) The area of each lot, in square feet, and outside dimensions, in feet.

- q) Front building setback lines on all lots and sites. Second front yard building setback lines at street intersection. For lots facing on curved streets the chord width of the lot at the front building setback line shall be shown.
- r) Location of City limits line and the outer border of the City's extraterritorial jurisdiction, if they traverse the subdivision, form part of the boundary of the subdivision, or are contiguous to such boundary.
- s) The date of preparation, and date of latest revision.
- t) The location, dimensions and identification of all existing pipeline easements.
- u) The name and registration number of the registered Surveyor responsible for preparing the plat.
- v) A list of the proposed restrictive covenants, conditions, and limitations to govern the nature and use of the property being subdivided.
- w) A North Point arrow and graphic scale.
- x) Data specifying the gross area of the subdivision, the proposed number of residential lots and area thereof, and the area in parks and in other non-residential uses.
- y) All land intended to be dedicated for public use or reserved in the deeds for the use of purchasers or owners of lots in the proposed subdivision, together with the purpose of conditions or limitations of such dedications, if any.
- z) A certificate of approval to be signed by the Planning and Zoning Commission Chair and the City Secretary shall be shown on the Plat. The following certificate shall be placed on the Final Plat by the subdivider:

"CITY OF BENBROOK

Approved by Planning and Zoning Commission:

Chair: _____

Attested by City Secretary: _____

Date of Approval: _____"

- aa) "FINAL PLAT" Designation listed on face of all copies.
- bb) Dedication Instrument: A statement signed and acknowledged by the owner dedicating all streets and alleys to the public in fee simple and all easements, parks and other open spaces to the public, and the developer's certification that all parties with any interest in the title to the subject property have joined in such dedication, duly executed, acknowledged and sworn to by said developer before a Notary Public. The dedication instrument must appear on the face of the plat. When applicable, an agreement showing the subdivider has made provision for perpetual maintenance thereof to the inhabitants of the subdivision should be shown or referenced on the face of the Plat. For a phased development the dedication shall be only for the section approved. An example of such a dedication instrument would read as follows:

- ee) A Statement, including the original seal and the original signature of the surveyor responsible for surveying the subdivision area.

“STATE OF TEXAS §
 § STATEMENT OF SURVEYOR
COUNTY OF TARRANT§

I, the undersigned, a public surveyor in the State of Texas, hereby state that this plat is true and correct and was prepared from an actual survey of the property made under my supervision on the ground.

(Surveyor's Seal)

Registered Professional Land Surveyor, Number

Date:

- ff) The following full statement of restrictions shall be placed in the dedication instrument of any subdivision plat that contains land designated as part of a 100-year floodplain by FEMA:

"Floodplain Restriction

No construction shall be allowed within a floodplain easement unless specifically approved by the City of Benbrook. Where construction is permitted, all finished floor elevations shall be a minimum of two (2) foot above the base flood elevation (100-year flood or one percent probability flood elevation.

Any existing creeks, lakes, reservoirs, or drainage channels traversing along or across portions of this addition, will remain as an open channel at all times and will be maintained by the individual owners of the lot or lots that are traversed by or adjacent to the drainage courses along or across said lots. The City of Benbrook will not be responsible for the maintenance and operation of said drainageways or for the control of erosion. Each property owner shall keep the natural drainage channels traversing adjacent to his property clean and free of debris, silt, or any substance which would result in unsanitary conditions and the City shall have the right of ingress and egress for the purpose of inspection and supervision of maintenance work by the property owner to alleviate any undesirable conditions which may occur. The natural drainage channel, as in the case of all natural drainage channels, is subject to storm water overflow and natural bank erosion to an extent that cannot be definitely defined. The City of Benbrook shall not be liable for damages of any nature resulting from the occurrence of these natural phenomena, nor resulting from a failure of any structures within the natural drainage channels. The natural drainage channel crossing each lot is shown by the floodplain easement line as shown on the plat."

- gg) Except for residential replats of less than six (6) lots or two (2) acres, whichever is less, Texas State Plane Coordinates shall be provided for at least two (2) corners of the Plat must be shown on the face of the Plat. The reference monuments and method of determining the coordinates (such as triangulation of City monuments or global positioning system techniques) shall be provided.
- hh) All distances shown on the Final Plat shall be horizontal ground lengths. The Plat shall state the Texas State Plane Coordinate System combined scale factor that is to be used to convert ground lengths to grid lengths.

4. When submitted, the Final Plat shall be accompanied by the Construction Plans for Public Improvements, as described in Section 16.20.020 of this Ordinance and the final iSWM™ site plan. Formal acceptance of the Final Plat for processing will not occur until approval of the site improvement engineering data is accepted by the City.

C. Processing of Final Plat

Processing of Final Plats shall be in accordance with this Ordinance, all other development regulations, and all applicable State and Federal regulations.

1. No Final Plat or Replat shall be approved unless it is in compliance with the Comprehensive Plan.
2. A Final Plat or Final Replat will not be accepted for processing if all or any portion of the land area encompassed within the Plat is included in or directly affected by any proposed amendment to the Comprehensive Plan, which has been set for formal presentation to the Planning and Zoning Commission or the City Council by placement on a formal agenda.
3. A Final Plat or Replat shall not be accepted for processing until all necessary application materials have been submitted and approved by the City. No Final Plat will be accepted for processing until the developer's agreements with the City are executed, all public improvements plans, specifications and cost estimates have been approved by the City Planner, and financial assurance has been provided. Any Final Plat submitted will be conditionally disapproved until such materials have been accepted.

D. Final Plat Approval

The Commission, acting through its Chair, shall act on a formally accepted Final Plat within thirty (30) days of the date of acceptance of the Final Plat for processing. In the case of a short form plat, the Commission as a whole shall act on a Final Plat. If said Plat is not approved, conditionally disapproved or disapproved within thirty (30) days from the date of acceptance, it shall be deemed to have been approved and a certificate, showing said acceptance date and the failure to take action thereon within thirty (30) days from said acceptance date, shall on demand be issued by the Commission and said certificate shall be in lieu of the endorsement herein required. Final plats meeting all conditions set on the Preliminary Plat by the Planning and Zoning Commission shall be approved by the City Staff. If a Final Plat contains significant deviation from the approved Preliminary Plat, Planning and Zoning Commission approval shall be required. The decision of the Commission shall be either approval, conditional disapproval, or disapproval of the Final Plat.

1. A Final Plat which meets all applicable requirements of the Subdivision Ordinance and any conditions of Preliminary Plat approval shall be approved by the Commission by placing thereon the signature of the Chair of the Commission and the attestation of the City Secretary. Approved Final Plats and supporting instruments shall be retained by the City Planner for recording as hereinafter specified.
2. Conditional disapproval shall constitute lack of approval of a Final Plat subject to conformity with prescribed conditions, but shall constitute approval when such conditions are met and approved by the City Planner.
3. Disapproval signifies rejection in toto of the Final Plat as submitted. The Commission, following Final Plat disapproval, may permit an applicant to then submit another Final Plat or reinstate the subdivision approval procedure at another step.
4. Conditionally disapproved Final Plats showing satisfaction of the conditions, in as many copies as required by the Commission, may be submitted at any time for approval.

- E. Upon approval of the Final Plat, the applicant shall submit two (2) blackline mylars and two (2) blueline or blackline copies of the plat with original seals and signatures and two original signed Dedication Instruments, tax certificates, groundwater availability certificate (if required), suitable for filing with the County along with recording fees required by the County Clerk..

F. Recording of Final Plat

After the Final Plat has been approved by the City Staff or Planning and Zoning Commission, as appropriate, and has been signed by the Chair and attested by the City Secretary, the Plat will be filed for recording with the County Clerk.

16.16.025 VACATING AND AMENDING PLATS

- A. A recorded plat may be vacated in accordance with the procedures and requirements set forth in Section 212.013 of the Local Government Code.

- 1. **Before the Sale of Any Lot:** Before the sale of any lot within a plat, the Plat may be vacated upon application of the proprietors of the land included in the plat, and after approval by the Commission. The vacation of the Plat does not take effect until the filing of a written instrument declaring the plat to be vacated has been executed, acknowledged, and recorded by the County Clerk of Tarrant County.
- 2. **After the Sale of any Lot:** After the sale of any lot within a plat, the Plat or any part of the Plat may be vacated upon the application of the owners of all the lots in the Plat and after approval by the Commission. The vacation of the Plat does not take effect until the filing of a written instrument declaring the Plat or a part of the Plat to be vacated has been executed, acknowledged, and recorded by the County Clerk of Tarrant County.

B. Rejection

The Commission may reject any application for vacating a plat which abridges or destroys any public rights in any public uses, improvements, streets, or alleys.

C. Replats and Amendments

After the sale of any lot within a plat, unless the owners of all the lots in the plat request vacation of the Plat or a part of the Plat, the Plat may be changed only after compliance with the replatting process in accordance with Section 212.014 and Section 212.015, Local Government Code, or the amending process in accordance with Section 212.016, Local Government Code. An Amending Plat may be filed in accordance with the procedures and requirements set forth in Section 212.016 of the Local Government Code. The Commission may approve and issue an Amending Plat, which may be recorded and controlling over the preceding plat without vacation of that plat and without notice and hearing, if the Amending Plat is signed and acknowledged by the owners of the property being replatted and is solely for one or more of the following purposes:

- 1. to correct an error in any course or distance shown on the preceding Plat;
- 2. to add a course or distance that was omitted on the preceding Plat;
- 3. to correct an error in a real property description shown on the preceding Plat;
- 4. to indicate monuments set after the death, disability, or retirement from practice of the surveyor responsible for setting monuments;

5. to show the location or character of a monument which has been changed in location or character or that is shown incorrectly as to location or character on the preceding Plat;
6. to correct any other type of scrivener or clerical error or omission previously approved by the City, including lot numbers, acreage, street names, and identification of adjacent recorded plats;
7. to correct an error in courses and distances of lot lines between two (2) adjacent lots if:
 - a) both lot owners join in the application for amending the Plat;
 - b) neither lot is abolished;
 - c) the amendment does not attempt to remove recorded covenants or restrictions; and
 - d) the amendment does not have a materially adverse effect on the property rights of the other owners in the Plat;
8. to relocate a lot line to eliminate an inadvertent encroachment of a building or other improvement on a lot line;
9. to relocate one or more lot lines between two or more adjacent lots if:
 - a) the owners of all those lots join in the application for amending the Plat;
 - b) the amendment does not attempt to remove recorded covenants or restrictions; and
 - c) the amendment does not increase the number of lots; or
10. to make necessary changes to the preceding plat to create six or fewer lots in the subdivision or a part of the subdivision covered by the preceding Plat if:
 - a) the changes do not affect applicable zoning and other regulations of the City;
 - b) the changes do not attempt to amend or remove any covenants or restrictions; and
 - c) the area covered by the changes is located in an area that the Commission or City Council has approved, after a public hearing, as a residential improvement area.
11. To replat one or more lots fronting on an existing street if:
 - a) the owners of all those lots join in the application for amending the plat;
 - b) the amendment does not attempt to remove recorded covenants or restrictions;
 - c) the amendment does not increase the number of lots; and
 - d) the amendment does not create or require the creation of a new street or make necessary the extension of municipal facilities.
12. If the Amending Plat involves four or fewer lots fronting an existing street and does not require the creation of any new street or the extension of municipal facilities, it may be approved by the City Planner. The City Planner may, for any reason, present the plat to the Commission for approval and shall refer the Plat to the Commission if he or she refuses to approve the Plat.

D. PROCEDURE

1. An application for vacating or amending a Plat shall be filed with the Planning and Zoning Commission on forms provided by the City Planner or designee.
2. The appropriate application fee as set forth in the Fee Schedule shall be paid at the time of application.
3. Amended plats should meet the same requirements set forth in the Ordinance as for Minor Plats.
4. The Planning and Zoning Commission may approve, conditionally disapprove or disapprove any Amending Plat or vacation request in accordance with the procedures for plat approval set forth in this Chapter.

16.16.030 SIGNING AND RECORDING OF SUBDIVISION PLAT

A. Signing of Plat

1. The Chair of the Planning & Zoning Commission and City Secretary shall sign all copies of the approved Final Plat.
2. If Public Improvements are to be installed and a surety required, the Chair of the Commission shall endorse approval only after the Developer's Agreement has been approved by the City Manager, and all fees have been paid.
3. The signature of the Chair of the Commission indicates approval of the platting of the land, not the improvements to be placed thereon.

B. Recording of Plat

1. It shall be the responsibility of the City Planner or designee to record the Plat with the County Clerk's office.
2. A blue-line or black-line copy of the approved Plat with all signatures shall be returned to the applicant. Additional copies can be provided upon prior arrangement with the City Planner or designee.

16.16.035 PROCESSING OF FINAL PLAT AND CONSTRUCTION PLANS

- A. No Final Plat or Replat shall be accepted for processing if it is determined to be administratively incomplete by the City Planner or designee. The application and fees shall be returned to the applicant until the submittal is complete.
- B. Upon receipt of the Final Plat with construction plans and the required application fees, the City Planner or designee shall check the Plat as to its conformity with the approved Preliminary Plat or City's Comprehensive Plan, Land Use Plan, zoning districts, lot size requirements, subdivision and street names and other applicable City standards.
- C. The City Planner or designee shall transmit copies of the Final Plat and construction plans to the City Engineer who will check same for conformity with applicable engineering standards and specifications set forth herein as well as with generally accepted engineering principles when not covered specifically herein. The City Engineer shall submit a written report to the City Planner with his/her suggestions as to modifications, additions, alterations or other matters pertinent to the Plat.

- D. The City Staff shall act on a plat within thirty (30) days after the date the Plat is filed. The Plat is considered filed when formal application has been made for approval, all required information including engineering plans have been submitted and the requisite fees paid. The plat is considered approved unless it is disapproved within thirty (30) days after the plat application is filed and accepted as administratively complete.
- E. If a Final Plat is disapproved, the City Planner, on request of an owner of an affected tract, shall certify the reasons for the action taken on the application.
- F. If the City fails to act on a plat within the prescribed period, the City Planner, on request shall issue a certificate stating the date the Plat was filed and that the City failed to act on the plat within the period.
- G. If the Final Plat is approved, the City Planner or designee shall have the approval certificate on the Plat executed by the Chair of the Planning and Zoning Commission and attested by the City Secretary or designee, contingent to the developer paying all development fees, impact fees, and assessment charges.
- H. After the Final Plat and plans have been approved by the City, but before construction of water, sewer, street or drainage improvements are started, the Subdivider shall furnish the City with two (2) full size and two (2) half-size sets of the completed detailed plans and specifications.
- I. Lot markers shall be installed in accordance with Section 16.20.040.
- J. The Final Plat shall be recorded by the City Planner or designee in the office of the County Clerk of Tarrant County within ten (10) days from and after the date of final acceptance.

16.16.040 WHERE A SUBDIVISION IS A UNIT OF A LARGER TRACT

- A. Where the proposed subdivision constitutes a unit of a larger tract owned by the subdivider, which is intended to be subsequently subdivided as additional units of the same subdivision, the Preliminary Plat shall cover the entire area of common ownership or joint development, showing the tentative proposed layout of streets, blocks, drainage, and other improvements for such areas. Thereafter, Final Plats of subsequent units of such subdivision shall conform to such approved Preliminary Plat, unless changed by the Commission. However, except where the subdivider agrees to such change, the Commission may change such approved Preliminary Plat only when the Commission finds:
 - 1. That adherence to the previously approved overall layout will hinder the orderly subdivision of other land in the area in accordance with the provisions of this Ordinance; or,
 - 2. That adherence to the previously approved overall layout will be detrimental to the public health, safety or welfare, or will be injurious to other property in the area.
- B. If a Final Plat or any combination of Final Plats comprises ninety percent (90%) or more of the unplatted property in common ownership on the Preliminary Plat or the remaining unplatted land would be three (3) acres or less, then a Final Plat for the entire remainder of the property shall be submitted for approval.

CHAPTER 16.20
ENGINEERING PLANS AND STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION

16.20.005 CONCEPTUAL ISWM™ SITE PLAN

The conceptual iSWM™ site plan shall be submitted at the time of Sketch Plat submittal at the same scale as the Sketch Plat (preferably 1" = 50') and shall include:

- A. Project Description
 - 1. Address and legal description of site
 - 2. Vicinity map
 - 3. Land use

- B. Existing conditions:
 - 1. Copy of applicable digital orthophotos showing the proposed project boundaries
 - 2. A topographic map of existing site conditions (no greater than 2-foot contour interval) with drainage basin boundaries indicated and project boundaries shown
 - 3. Total area size of development (in acres)
 - 4. Total impervious area as a percentage (%) of total area
 - 5. Benchmarks used for site control
 - 6. Perennial and intermittent streams
 - 7. Map of predominant soils from USDA soil surveys
 - 8. Boundaries of existing predominant vegetation
 - 9. Location and boundaries of other natural feature protection and conservation areas, such as wetlands, lakes, ponds, floodplains, stream buffers and other setbacks (e.g. drinking water well setbacks, septic setbacks, etc.)
 - 10. Location of existing roads, buildings, parking areas and other impervious surfaces
 - 11. Existing utilities (e.g. water, sewer, gas, electric) and easements
 - 12. Location of existing drainage conveyance systems such as grass channels, swales, and storm drains
 - 13. Flow paths
 - 14. Location of floodplain/floodway limits and relationship of site to upstream and downstream properties and drainage systems
 - 15. Location and dimensions of existing channels, bridges or culvert crossings.

- C. Conceptual Site Layout
 - 1. Completed iSWM™ Conceptual Plan Worksheet (See Section 5.0 of iSWM™ Criteria Manual for Site Development and Construction (2010).)
 - 2. Hydrologic analysis to determine conceptual runoff rates, volumes, and velocities to support selection of Storm Water Controls.
 - 3. Conceptual site design identifying integrated site design practices used
 - 4. Identification of storm water site design credits
 - 5. Identification and calculation of water quality volume reduction, if applicable
 - 6. Conceptual estimates of the three (3) storm design approach requirements (i.e. 1-year, 25-year and 100-year 24-hour storms)
 - 7. Conceptual selection, location and size of proposed structural storm water controls
 - 8. Conceptual limits of proposed grading and clearing
 - 9. Total proposed impervious area, as a percentage of total area.

16.20.007 Preliminary iSWM™ Site Plan

For a Standard Plat, this sheet shall be submitted with the Preliminary Plat and shall be at the same scale as the Preliminary Plat. For a Minor Plat, this sheet shall be submitted with the Final Plat. The Preliminary iSWM™ Site Plan should consist of maps, narrative, and supporting design calculations (hydrologic and hydraulic) for the proposed storm water management system, and shall include the following sections:

- A. Existing Conditions Hydrologic Analysis: Provide an existing condition hydrologic analysis for storm water runoff rates, volumes, and velocities, which includes:
 - 1. Existing conditions data developed in the Conceptual iSWM™ Site Plan
 - 2. All existing storm water conveyances and structural control facilities
 - 3. Direction of flow and exits from the site
 - 4. Analysis of runoff provided by off-site areas upstream of the project site
 - 5. Methodologies, assumptions, site parameters and supporting design calculations used in analyzing the existing conditions site hydrology

- B. Project Description and Design Considerations: Provide an updated description of the project and the considerations and factors affecting the design approach that have changed between the Conceptual and Preliminary plans, including:
 - 1. A description of the overall project and the site plan showing facility locations, roadways, etc.
 - 2. A discussion of the applicable local criteria and how it will be integrated into the design of the project
 - 3. Evaluate the integrated site design practices and their applicability to this site
 - 4. A discussion of any credits for integrated site design being requested
 - 5. A discussion of the water quality treatment techniques (pollution prevention practices) that are to be utilized on this site, if applicable
 - 6. A determination of groundwater recharge considerations, if applicable, for this site,
 - 7. Identify hotspot land uses, if applicable, and how runoff will be addressed

- C. Post-Development Hydrologic Analysis: Provide a post-development hydrologic analysis for storm water runoff rates, volumes, and velocities, which includes:
 - 1. A topographic map of developed site conditions (minimum 2-foot contour interval recommended) with post development basin boundaries indicated
 - 2. Total area of post development impervious surfaces and other land cover areas for each subbasin affected by the project
 - 3. Runoff calculation for flood control and streambank protection for each subbasin, as well as any applicable water quality calculations
 - 4. Location and boundaries of proposed natural feature protection and conservation areas
 - 5. Documentation and calculations for any applicable site design credits or water quality volume reduction methods being used
 - 6. Methodologies, assumptions, site parameters and supporting design calculations used in analyzing the post-development conditions site hydrology
 - 7. Supporting documentation that there is existing streambank protection/reinforcement or that the planned development will provide streambank protection downstream
 - 8. Supporting calculations for a downstream peak flow analysis to show safe passage of post-development design flows downstream. Document point downstream at which analysis ends, and how it was determined.

In calculating runoff volumes and discharge rates, consideration may need to be given to any planned future upstream land use changes. Depending on the site characteristics and given

local design criteria, upstream lands may need to be modeled as “existing conditions” of “projected buildout/future condition” when sizing and designing on-site conveyances and stormwater controls.

- D. Storm Water Management System Design: Provide drawings and design calculations for the proposed storm water management system, including:
1. A drawing or sketch of the storm water management system including the location of non-structural site design features and the placement of existing and proposed structural storm water controls. This drawing should show design water surface elevations, storage volumes available from zero to maximum head, location of inlets and outlets, location of bypass and discharge systems, and all orifice/restrictor sizes.
 2. Narrative describing that appropriate and effective structural storm water controls have been selected
 3. Cross-section and profile drawings and design details for each of the structural storm water controls in the system. This should include supporting calculations to show that the facility is designed to the applicable design criteria.
 4. Hydrologic and hydraulic analysis of the storm water management system for all applicable design storms (should include stage-storage or outlet rating curves, and inflow and outflow hydrographs)
 5. Documentation and supporting calculations to show that the storm water management system adequately meets the integrated design approach (see iSWM™ Technical Manual)
 6. Drawings, design calculations and elevations for all existing and proposed storm water conveyance elements including storm water drains, pipes, culverts, catch basins, channels, swales and areas of overland flow.

16.20.010 PRELIMINARY WATER AND SEWER PLAN

This sheet shall be submitted with the Preliminary Plat for Standard Plats in a form acceptable to the Benbrook Water Authority. It shall be prepared from the Preliminary Plat, but shall also include topographical contours at the intervals specified for Preliminary Drainage Plan, and show the following:

- A. Existing sewers, water mains, gas mains, electric and telephone lines, culverts, or other underground structures or utilities within the tract and immediately adjacent thereto with pipe sizes, grades, and locations indicated.
- B. Indicate the direction and distance to, and size of the nearest water mains and sewers in the event they are not on or adjacent to the tract, showing invert elevation of sewers, if any.
- C. The size and location of all proposed sewer mains and proposed easements, if required, including manholes. Preliminary sewer plans are required to determine location of easements.
- D. The size and location of all proposed water distribution mains including valves and fire hydrants.
- E. The size of water mains according to requirements of the Benbrook Water Authority.

In the event water mains and sewers are not on or adjacent to the tract, indicate the direction and distance to, and size of the nearest ones, showing invert elevation of sewers.

16.20.015 PRELIMINARY STREET PLAN

This sheet shall be submitted with the Preliminary Plat for Standard Plats and shall be prepared from the Preliminary Plat, showing topographical contours as applicable, and showing the following:

- A. Type of street to be constructed (i.e. concrete).
- B. Classification (i.e. arterial, collector, local).
- C. Additional easement or right-of-way requirements.
- D. Design Standards used.
- E. Relationship of existing and planned streets, to topographical conditions, if applicable.

16.20.017 PRELIMINARY LOT GRADING PLAN

This sheet shall be submitted with the Preliminary Plat for Standard Plats and shall be prepared from the Preliminary Plat, showing topographical contours as applicable, and showing the following:

- A. Planned grading contours, elevations, earth works, slopes, retaining walls, or other grading information if required by the City Engineer.

16.20.020 CONSTRUCTION PLANS FOR PUBLIC IMPROVEMENTS

These plans shall be submitted with the Final Plat for Standard Plats and for Minor Plats with infrastructure when required.

A. GENERAL REQUIREMENTS

Prior to the commencement of any construction of public works improvements, the developer or person who intends to construct such projects shall present plans, specifications, and projections of probable cost setting forth in detail all elements of construction to the City for approval. In the case of public improvements associated with subdivision development, the engineering plans (including descriptions of all necessary off-site easements) must be approved in accordance with all requirements of the Subdivision Ordinance prior to approval of the Final Plat.

1. Four (4) copies of complete plans, specifications, engineering calculations, and detailed cost estimates for streets, drainage, sanitary sewers, water distribution, and any other improvements to be performed, with the Engineer's seal affixed, are required for submission at Final Plat approval. Upon approval, two (2) full size and two (2) half-size copies of the construction plans shall be submitted.
2. Final iSWMTM Site Plan, including the construction Storm Water Pollution Prevention Plan (SWPPP), landscaping plan, operations and maintenance plan, and evidence of acquisition of applicable federal, state and local permits.
3. These plans shall be submitted on standard 22 by 34 inch or 24 x 36 inch sheets for full size sheets and 11 by 17 inch for half-size sheets, and shall include the information required herein. Plan and profile sheets shall be oriented with the plan view at the top portion of the sheet.
4. Each plan shall show the seal and signature of the registered professional Engineer who prepared the plan. The subdivider shall retain a registered civil Engineer, licensed to practice in the State of Texas, for all design in new subdivisions or developments, including streets, storm drains, water and sanitary sewers.
5. Upon approval of the plans, the Developer shall furnish two (2) full-size and two (2) half-size sets of final approved plans to the City Planner or designee for the Developer's Agreement.

B. CONTENT OF PLANS, SPECIFICATIONS AND COST ESTIMATES

1. The plans shall include plan view, profile and section views of the proposed improvements. Construction details of all structures and appurtenances including dimensions, reinforcing, and components such as grate and manhole covers shall be shown. The proposed curb and gutter type and location in relation to the center line and right-of-way, the proposed sidewalk dimension and the proposed parkway grading shall be shown on street plans. This information shall be given for each of the different types of streets and alleys in the subdivision. Soils test by an approved soil testing laboratory shall be submitted with the plans to determine the limits and amount of lime or cement stabilization required.
2. The plans shall include the alignment of each street, alley, crosswalk and drainage and any other easement, and a beginning and end station of the point of intersection of each curve. The station and angle of each intersection with another street, alley, or drainage easement, the station and radius of each curb return, the location of all monuments and the length, width, thickness of base, subgrade and surface material of each street.
3. The plans shall also include the location, description and elevation of all benchmarks, the direction of storm drainage flow at each intersection, the flow line elevation of each drainage structure, the flow line elevation of each storm sewer at each point of change of grade and each end and the intervening gradient, the profiles of streets, alleys, and drainage structures shall show the natural ground at adjacent property lines and the proposed center line.
4. The plans and profiles should be drawn at a scale of one inch (1") to forty feet (40') horizontal and one inch (1") to four feet (4') vertical on sheets no larger than twenty-four inches by thirty-six inches (24" x 36") in size. North arrow and date of preparation must be shown on each sheet. All public work improvement plans shall bear the seal and signature of a professional engineer registered in the State of Texas.
5. The applicant shall include on the plans all calculations and assumptions used in the design of the proposed improvements. Calculations shown on the Plans will not have to be repeated in a report.
6. Cost projections shall be prepared using quantities shown on the construction plans and recent unit prices from bids on similar projects. Reasonable contingencies should be included to cover uncertainty in the projection. Actual bids supported by bid and performance bonds may be used in lieu of projections of probable cost.
7. Upon approval of the construction plans, specifications and projections of probable cost by the City Engineer; approval of the contract documents, bonds and financial assurance; acquisition of all necessary off-site easements, and upon receipt of the inspection fees, Notice of Intent (NOI), Storm Water Pollution Prevention Plan and Erosion Control Deposit, and conformance with all requirements of and approval by the Benbrook Water Authority, the City shall schedule a pre-construction conference and issue a permit for the construction of public works improvements.

C. FINAL DRAINAGE PLANS

Upon approval of the preliminary drainage study, the Developer shall submit detailed plans, specifications and cost projections prepared by a registered Professional Engineer registered in the State of Texas and experienced in municipal drainage work. Existing and proposed flow lines of all improvements shall be shown. Unless otherwise specified herein, drainage requirements shall be based on the ISWMTM Criteria Manual for Site Development and Construction. The Hydraulic Manual prepared and compiled by the Texas Department of Transportation Bridge Division, with current

revisions, may be used in cases not covered by the iSWM™ Design Manual for Site Development. The following shall be included in the Plans:

1. Final iSWM™ Site Plan, which includes all of the revised elements included in the Preliminary iSWM™ Site Plan, plus a Construction Storm Water Pollution Prevention Plan (SWPPP), a Landscaping Plan, Operations and Maintenance Plan, evidence of acquisition of Applicable Federal and State permits, and any waiver requests.
2. Final grading and drainage construction plans, indicating two foot (2') contours. All street width and grades shall be indicated on the plan, and run-off figures shall be indicated on the outlet and inlet side of all drainage ditches and storm sewers, and at all points in the street at changes of grade or where the water enters another street or storm sewer or drainage ditch. Drainage easements shall be indicated.
3. When a drainage channel or storm sewer is proposed, complete plans, profiles and specifications shall be submitted showing complete construction details. Scales shall be one inch equal to 40 or 50 feet horizontally and one inch equal 4 or 5 feet vertically.
4. Two (2) copies of detailed cost estimates.
5. A plan of the development shall be submitted depicting the final grading contours and elevations, earthwork, slopes, retaining walls, minimum finished floor elevations of all affected structures, and any other information considered necessary by the City Engineer at a scale of 1" = 100' minimum.
6. Complete detention pond plans and calculations meeting the requirements of paragraph 16.28.035(C).

D. FINAL WATER AND SEWER PLANS

1. The Final Water and Sewer Plans shall be submitted to the Benbrook Water Authority in accordance with the Policies and Procedures of the Benbrook Water Authority. In addition, three copies shall be submitted to the City. These plans shall be submitted with the Final Plat for Standard Plats and shall be prepared from the Preliminary Plat, but shall also include topographical contours and shall show the following:
 - a) Existing sewers, water mains, gas mains, electric and telephone lines, culverts, or other underground structures or utilities within the tract and immediately adjacent thereto with pipe sizes, grades, and locations indicated.
 - b) 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 location of valves, fire hydrants, and fittings, etc., in conformance with the criteria as shown in the part of the Ordinance listed as "Design Provisions". 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 sea level datum. If the applicant does not propose to install a sewage collection system, a preliminary sewage collection plan may be required, suitable for determination of easement requirements.
 - c) Indicate the direction and distance to, and size of the nearest water mains and sewers in the event they are not on or adjacent to the tract, showing invert elevation of sewers, if any.

- d) A plan and profile of the proposed water distribution system showing pipe sizes and location of valves, fire hydrants, and fittings and other facilities. A profile is required for all water lines 12 inches in diameter and larger. Each sheet shall include north point, scale, date, and benchmark description to sea level datum.
 - e) The size and location of all proposed water distribution mains including valves and fire hydrants.
 - f) The size of water mains according to requirements of the Benbrook Water Authority.
 - g) Scales shall be one inch equal to 40 or 50 feet horizontally and one inch equal 4,5, or 10 feet vertically.
2. A copy of the executed Developer-Authority Agreement, in accordance with the Policies and Procedures of the Benbrook Water Authority.

E. FINAL STREET PAVING PLANS

Final Street Paving Plans shall include:

- 1. A plan and profile of each street with centerline and top curb grades, existing and proposed ground line shown. Each sheet shall include north point, scale, date, and a minimum of two benchmark descriptions to sea level datum. The plans shall include:
 - a) Type of street to be constructed (i.e. Portland cement).
 - b) Classification (i.e. arterial, collector, residential).
 - c) Additional easement or right-of-way requirements.
 - d) Design Standards used.
 - e) Relationship of existing and planned streets, to topographical conditions, if applicable.
 - f) Planned grading contours, elevations, earth works, slopes, retaining walls, flow arrows or other grading information required by the City Engineer.
- 2. Scales shall be one inch equal to 40 or 50 feet horizontally and one inch equal 4 or 5 feet vertically.
- 3. The typical cross-section of proposed streets showing the width of roadways and type of surface, reinforcing, subgrade, sidewalks, curb height, crown height and cut/fill slopes shall be shown.
- 4. All other requirements of the current street standards shall be included in the plans.
- 5. The plans shall contain a statement of "Released for Construction" for signature of the City Engineer.
- 6. Two (2) copies of detailed cost estimates.

16.20.025 OTHER UTILITIES

The Subdivider must furnish a written statement to the City designating how the subdivision will be served by electrical, natural gas, telephone and cable television. Utility construction shall be coordinated with street construction to avoid unnecessary pavement cuts.

16.20.030 DESIGN SUMMARY

The City Engineer may require a separate document or report entitled "Engineering Report" that shall be submitted with final plans and specifications. This report shall summarize calculations and other Engineering information pertaining to the major items of design significance as may be necessary in the City's review of the plans and specifications to determine whether the facilities proposed for construction have been designed in accordance with the intent of the Design Standards contained or referenced herein. Calculations should include drainage facilities, water demand, sewage flows, and any others that are considered necessary by the City.

16.20.035 STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION

The City of Benbrook, Texas, herein has adopted the Standard Specifications for Public Works Construction (Fourth Edition, 2004, as amended) as published by the North Central Texas Council of Governments (NCTCOG), plus any local amendments adopted by the City of Benbrook, for use in public works or facilities construction within the City of Benbrook and its extraterritorial jurisdiction. These specifications are adopted in their entirety except as may be amended in the local amendments that are included in the Benbrook Design Standards and Criteria. All builders, developers, and contractors are to utilize said specifications in the construction of any public facilities or projects which are anticipated to be dedicated to, accepted by, or utilized by the public within the City of Benbrook and its extraterritorial jurisdiction. To the extent that any of the provisions of these standard specifications are in conflict with any other City ordinances, the most restrictive or exacting standard shall apply.

16.20.040 MONUMENTATION AND BENCHMARKS

The boundaries of any subdivision presented for review and recording shall be monumented and such monuments shall be duly noted on said plat and within the accompanying dedication instrument according to Rule 663.11 of the Texas Board of Land Surveying (Certification and Monumentation of Surveys). In no case shall a boundary course of said subdivision be monumented in intervals greater than 1300 feet.

Subsequent to installation of utilities and pavements, all lot corners, curve points, and changes in course in any line with the subdivision shall be monumented in accordance with said Board of Land Surveying Rule 663.11 by the platting surveyor under the sponsorship of the developer.

- A. All monuments shall be of materials recognizable as being those of property boundary monuments by professional surveying standards, and shall be of sufficient length and girth and placed in locations sufficiently stable to withstand abuse of normal conditions with significant movement.
 - 1. Under most circumstances no steel rods smaller than two inches (2") in diameter and shorter than 13 inches in length should be used nor should pipes smaller than two inches (2") inside diameter and shorter than 13 inches in length be used.
 - 2. No monument made of a wood material shall be used.

- B. A minimum of three (3) elevation benchmarks shall be installed in all Standard Plats reflecting elevation using North American Datum of 1983 (in feet). The City may require the installation of fewer benchmarks in small projects or additional benchmarks in unusually large or complex sites.

16.20.040 EROSION AND SEDIMENTATION CONTROL

All construction projects shall conform to the City's Erosion and Sediment Control Ordinance (codified as Chapter 15.42 of the Benbrook Municipal Code) and shall include temporary erosion and sedimentation controls in accordance with Item 201 of the Standard Specifications and Integrated Storm Water Management Design Manual for Construction (2003) published by the North Central Texas Council of Governments. Storm Water Pollution Prevention Plans shall be submitted for review by the City Engineer prior to release of construction projects. The Developer and his engineer shall be responsible for preparation of a Storm Water Pollution Prevention Plan (SWPPP) in accordance with the Texas Commission on Environmental Quality (TCEQ) and U.S. Environmental Protection Agency (EPA) requirements. TCEQ and EPA permitting shall also be the responsibility of the developer and his engineer.

**CHAPTER 16.24
DEVELOPER'S AGREEMENT, FINANCIAL ASSURANCE
AND CONSTRUCTION CONTRACTS FOR PUBLIC IMPROVEMENTS**

16.24.005 PROCEDURES

A. CONTRACT REQUIRED

The Developer shall be required to execute a Developer's Agreement as a condition of plat approval whenever the installation of community facilities or public improvements is required. The City shall prepare the Developer's Agreement after the final engineering plans and cost estimates have been approved. Samples of Developer's Agreements and Bond Instruments are available upon request.

B. APPROVAL OF CONTRACT

1. After the contract has been signed by the developer and the required performance bond, payment bond, surety, or irrevocable letters of credit, and maintenance bonds meeting the requirements of Texas Government Code, Chapter 2753, Title 10, Section F have been posted with the City, the City Planner may forward the Developer's Agreement to the City Attorney for review and approval.
2. The City Manager shall review and sign the contract on behalf of the City after receiving comments of the City Planner and City Attorney.
3. If any special provisions or deviations from established policies are included in the contract, specific approval of the special provisions or deviations by the City Manager is required.
4. No construction work shall begin on the subdivision before the Developer's Agreement is approved and signed by the City Manager.
5. The City will use its best effort to expedite all necessary instruments and documents within the City administration.

C. CHANGES IN CONTRACT

Any subsequent changes in the plans and specifications of the approved project proposed by the developer shall necessitate an amendment to the Developer's Agreement and amendments to all required financial assurance instruments. An increase in the project scope shall also require an increase in the Inspection Fee, as authorized in paragraph 6.3.A below. The Developer shall bear the full cost of any additional work required by the City Attorney and/or City Engineer in revising and/or reviewing the revised documents and approval shall not be granted until such additional fees are paid.

16.24.010 PERFORMANCE BONDS, PAYMENT BONDS AND MAINTENANCE BONDS

- A. Performance bonds, sureties or irrevocable letters of credit in forms provided by the City Attorney meeting the requirements of Texas Government Code, Chapter 2753, Title 10, Section F shall be required for any required public improvements or community facilities prior to the filing of the Final Plat and issuing of any building permits. Bonds, irrevocable letters of credit, certificates of deposit or cash deposits will be for 100% of the value, as determined by the City Engineer, of the construction costs of all facilities to be constructed by the developer.

1. A cash deposit may be made with the City in lieu of the performance bond. The cash deposit shall be held by the City in a regular insured savings account and shall accrue interest at the current regular savings account rate of interest. Interest shall accrue in the account to the

benefit of the subdivider and shall be returned to the developer with the cash deposit upon satisfactory completion of the facilities and acceptance by the City.

2. A certificate of deposit issued by any financial institution, which is insured by the Federal Deposit Insurance Corporation or Federal Savings and Loan Insurance Corporation, shall be held in the City depository in lieu of the performance bond. When this option is exercised the subdivider shall execute four copies of a letter (approved by the City) assigning the deposit to the City and providing for the City to withdraw the deposit if necessary to complete construction. Such letter of assignment must be accepted in writing by the financial institution. Upon satisfactory completion of the facilities for which the deposit is made as security, the City of Benbrook shall reassign the deposit to the developer including accrued interest or dividends thereon.
 3. When the option is exercised to provide an irrevocable letter of credit from a financial institution, the form of the letter shall be approved by the City Attorney. The international letter of credit form used by banks is normally acceptable.
- B. The developer shall provide a payment bond meeting the requirements of Texas Government Code, Chapter 2753, Title 10, Section F guaranteeing the full and proper protection of all claimants supplying labor and material in the prosecution of the work provided in the contract in an amount equal to 100 percent of the value of the construction costs of all facilities to be constructed by the developer. The same conditions shall prevail as under paragraph 6.2.A(1), (2), or (3) above when certificates of deposit, irrevocable letters of credit or cash deposits are used instead of surety company bonds.
- C. The developer shall provide a maintenance bond meeting the requirements of Texas Government Code, Chapter 2753, Title 10, Section F guaranteeing and agreeing to pay any necessary maintenance for a period of two (2) years in an amount equal to 100 percent of the value of the construction costs of all facilities to be constructed by the developer. The same conditions shall prevail as under paragraph 6.2.A(1), (2), or (3) above when certificates of deposit, irrevocable letters of credit or cash deposits are used instead of surety company bonds.

16.24.015 INSPECTIONS AND APPROVAL OF PUBLIC IMPROVEMENTS

- A. The City Council shall establish fees for the inspection of public improvements as part of the Fee Schedule. No person shall be granted notice to proceed to construct, reconstruct, cut or repair any street, drainage or sanitary sewer facility without paying the fees for the inspection of such work.
- B. The Developer's contractor shall give at least twenty-four (24) hours notice in writing to the City of intent to commence actual construction of the facilities in order for inspection personnel to be made available.
- C. The Subdivider shall delay connection of buildings to service lines of sewer and water mains until said sewer and water mains and service lines have been completed and accepted by the City and the Benbrook Water Authority.
- D. It shall be the duty of the Subdivider to notify all contractors and sub-contractors working for him that all of their work is subject to inspection by the City Inspector at any time. Certification of materials being used may be required by the City Inspector.
- E. Laboratory tests required by the City Inspector shall be performed by approved independent testing laboratories and will be at the discretion of the City Inspector. Approved laboratories are laboratories that are members of the American Council of Independent Laboratories and shall comply with standard recommended practice for inspection and testing agencies for concrete, steel, and bituminous materials as used in construction, ASTM Designation E 329. All costs for laboratory tests shall be

shall be borne by the Subdivider or his Contractor.

- F. Should any point not be covered in the plans, or Developer's Agreement, the Subdivider shall be required to contact the City Engineer for a determination as to the City's requirements.
- G. Any work, which in the opinion of the City Inspector does not meet the City requirements or has not had proper City inspection, shall be corrected. The Inspector shall notify the contractor and subdivider in writing, of the reasons for requiring the contractor to cease all operations until the defect has been corrected in order to comply with City requirements and receive proper inspection.

16.24.020 DEFERRAL OR WAIVER OF REQUIRED IMPROVEMENTS

- A. The Planning and Zoning Commission may defer, reduce, or waive at the time of plat approval, subject to appropriate conditions, the provision of any or all design requirements or improvements as, in its judgment, are not necessarily in the interest of the public health, safety, and general welfare.
- B. Whenever it is deemed necessary by the Planning and Zoning Commission to defer the construction of any improvements required herein because of incompatible grades, future planning, inadequate or lack of connecting facilities, or for other reasons, the subdivider shall pay his share of the costs of the future improvements prior to approval and recording of the Final Plat. In lieu of a cash payment, the subdivider may use one of the other improvement guarantees set forth in this ordinance.

16.24.025 PUBLIC CONSTRUCTION CONTRACTS

For projects where the City of Benbrook will act as developer, plans and specifications shall be prepared for approval by the City Engineer and projects bid according to requirements of the Texas Local Government Code. Contractors will be required to provide performance bonds, payment bonds, insurance and a two-year maintenance bond in accordance with city requirements. The developer shall be required to pay a cash deposit to cover the work in accordance with the terms of the Developers Agreement.

16.24.030 PRIVATE DEVELOPER CONSTRUCTION CONTRACT REQUIREMENTS

For private development projects, the developer may enter a private contract to complete the required public improvements. The developer/contractor will be required to provide the City the following sureties:

- A. Since the developer is providing a financial assurance surety to cover performance under Section 16.24.010.A, a separate performance and payment bond is not required from the contractor. However, it may be in the developer's best interests to require those from his/her contractors since the City will not release the financial assurance until work is complete and a release of lien is provided by subcontractors.

B. MAINTENANCE BOND

The contractor will be required to make a Maintenance Bond of not less than one hundred percent (100%) of the contract price conditioned upon the maintenance of and the repairs to the construction under the Developer's Agreement for a period of two (2) years from the date of City acceptance of the project. All contractors employed by the subdivider shall furnish the City a good and sufficient two (2)-year maintenance bond, in an amount equal to one hundred (100%) percent of the costs of the improvements, executed by a reputable and solvent corporate surety, holding a license to do business in the State of Texas, 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. Such Bond to be approved as to form and legality by the City Attorney.

C. STATE SALES TAX

The Developer's Agreement is usually for the improvement of streets, storm sewers, or utilities in right-of-way which will be dedicated to the Public and the City of Benbrook, an organization which qualifies for exemption pursuant to the provisions of Article 20.04(F) of the Texas Limited Sales, Excise and Use Tax Act. The Contractor performing this construction can probably purchase, rent or lease all material, supplies, and equipment used or consumed in the performance of the Developer's Agreement by issuing to his supplier an exemption certificate in lieu of the tax, said exemption certificate complying with State Comptroller's ruling #95-0.07. Any such exemption certificate issued by the Contractor in lieu of the tax shall be subject to the provisions of the State Comptroller's ruling #95-0.09 as amended to be effective October 2, 1976.

D. INSURANCE

Prior to commencing the work, the Contractor shall furnish to the City of Benbrook and/or Owner proof of satisfactory carriage of insurance in accordance with the standard requirements of Contractors doing work of the nature herein proposed. The amount of insurance shall conform to the requirements in the Standard Specifications.

E. INDEMNIFICATION

The Contractor must agree to fully indemnify and save whole and harmless, the City from all costs or damages arising out of any real or asserted claim or cause of action against it of whatsoever kind of character and in addition from any and all costs or damages arising out of any wrongs, injuries, demands or suits for damages, either real or asserted, claimed against it that may be occasioned by any act, omission, neglect or misconduct of the said Contractor, his agents, servants, and employees. The Contractor must further agree to comply with all applicable laws, regulations, ordinances, buildings and construction codes of the City of Benbrook and the State of Texas, and with any regulations for the protection of workers which may be promulgated by the government, and shall protect such work with all necessary lights, barriers, safeguards, and warnings as are provided for in said specifications and in the ordinances and regulations of the City.

16.24.035 GENERAL CONSTRUCTION REQUIREMENTS

Prior to initiating any construction work, the contractor and all subcontractors shall conduct a preconstruction conference with the City, City Engineer, City Inspector, and all affected franchised utilities. Prior to the Preconstruction Conference, the contractor shall provide a proposed construction sequence and schedule and a traffic safety plan, if required, for review and approval by the City Engineer. As a general rule, the following construction sequence shall be employed:

- Step 1. Install temporary erosion/sedimentation controls
- Step 2. Excavate detention ponds
- Step 3. Rough grading of streets, lots, building pads, etc.
- Step 4. Install utilities and storm drain facilities
- Step 5. Final grading
- Step 6. Paving
- Step 7. Finish detention ponds
- Step 8. Hydromulch, final clean-up.

16.24.040 APPROVAL OF WORK

All work performed in construction, reconstruction, cutting and repairing of streets, storm sewer and other public improvements shall be subject to the approval of the City Engineer, whose decision shall be final. Approval by the City Inspector, City Engineer or other designated representative shall not relieve the developer or his/her contractor or design engineer from their responsibilities regarding the design and construction of the

construction of the improvements.

The City shall not release the obligations of any financial assurance, including performance bonds, until the improvements have been approved and accepted by the City. The Developer is strongly urged to withhold final payment to the Contractor until such acceptance occurs, since the City shall hold the Developer responsible for completion of the project. The City shall not approve or arbitrate quantities for which payment is to be based.

16.24.045 OWNERSHIP AND MAINTENANCE OF COMPLETED PUBLIC FACILITIES

Upon acceptance by the City of completed construction, all street improvements including construction of streets, alleys, thoroughfares, curbs, gutters, sidewalks, storm sewers, and drainage channels within dedicated right-of-way and easements shall be and remain the property of the City of Benbrook. The Contractor shall be responsible for maintenance of the completed public improvement for a two (2) year period, following acceptance by the City. After expiration of the two-year maintenance period, the improvements shall be maintained by the City.

16.24.046 OWNERSHIP AND MAINTENANCE OF PRIVATE AND COMMON AREA FACILITIES

Except as may be otherwise provided by City ordinance or city policy, it shall be the responsibility of the applicable homeowners association, property owners association or individual property owner to maintain any facilities or infrastructure located on private property or within privately-held common areas.

**CHAPTER 16.28
DESIGN STANDARDS AND REQUIREMENTS**

16.28.005 GENERAL DESIGN PRINCIPLES

The quality of design of the City is dependent on the design quality of the individual subdivisions that compose it. Good community design requires the coordination of the efforts of each subdivider and developer of land within the community. Therefore, the design of each subdivision shall be prepared in accordance with the design principles, concepts and standards in the Comprehensive Plan, and in accordance with the following provisions:

A. PHYSICAL CONDITIONS

The arrangement of lots and blocks and the street system should be designed to make the most advantageous use of topography and natural physical features. Trees and native vegetation should be preserved. The system of streets and sidewalks, and the layout and arrangement of blocks and lots should be designed to take advantage of the natural and scenic qualities of the area. Land which the City finds to be unsuitable for subdivision or development due to flooding, improper drainage, adverse earth formation, utility or pipeline easements or other features which will reasonably be harmful to the safety, health, and general welfare of the present or future inhabitants of the subdivision or its surroundings, shall not be developed unless adequate methods are formulated by the developer and approved by the Planning and Zoning Commission that will solve the problems created by the unsuitable land conditions.

B. The following general design requirements are intended to facilitate that the proposed subdivision is coordinated with its immediate neighbors with respect to land use, street connections, utilities, drainage facilities, and the possible dedication of parks and open spaces:

1. **Conformity with Comprehensive Plan:** The subdivision shall conform to the Comprehensive Plan of the City and elements thereof.
2. **Provision for Future Subdivision:** If a tract is subdivided into parcels larger than ordinary building lots, such lots shall be so arranged as to permit the logical location and opening of future streets and possible resubdivision of lots with provision for adequate utility easements and connections.
3. **Reserve Strips Prohibited:** There shall be no reserve strips controlling access to land dedicated or intended to be dedicated to public use.
4. **Access to Lots:** Each lot shall abut on a dedicated public street or an approved private street.
5. **Public Improvements:** All public improvements shall be designed and constructed in a manner to meet or exceed the Standard Specifications for Public Works Construction as identified in 16.20.035 or the City's Design Standards and Criteria for Streets, Drainage and other Public Improvements as promulgated by the City Manager.
6. The subdivision plat shall provide for the logical extension of abutting and proposed utilities and drainage easements and improvements in order to provide for system continuity and to promote future development of adjacent areas.
7. **Access to Subdivision:** Each subdivision having more than 20 lots shall be designed to have at least two points of access.

C. Planned Development Districts

In order to promote the health and general welfare of the community and to preserve and make available open space, the Planning and Zoning Commission may grant a subdivider the right to vary the residential density within a tract being developed which has been zoned "PD" Planned Development, or which has a "PD" suffix to its regular zoning district designation under the Zoning Ordinance of the City of Benbrook (Ordinance 808 as amended). Any deviation from the density and lot area requirements, without approval of a variance as provided in Section 17.16.060 of the Benbrook Municipal Code, shall be subject to the following conditions:

1. The overall density shall not exceed that of the zone in which the land occurs. The minimum lot area shall not be less than sixty-six percent (66%) of the minimum normally required in the zoning district in which the land occurs.
2. An overall plan of the entire tract shall be provided showing roads, lot lines, lot areas, easements, encumbrances and other relevant data and shall be submitted in accordance with the Subdivision Regulations with the locations of individual houses, structures, areas of shrubs, and/or trees to be retained, location of trees of fifteen inch diameter (15" dbh) or more, existing contours and proposed grading, drainage and landscaping shown as well.

16.28.010 PRESERVATION OF TREES AND NATIVE VEGETATION

A. Policy

The purpose of these regulations is to promote the preservation of trees, tree stands and existing tree canopy, to protect trees during construction, to facilitate site design and construction that contribute to the long term viability of existing trees, to increase property values and promote environmental sustainability and to regulate the removal of trees. To the extent possible, the natural landscape shall be preserved in its natural state. Structures, driveways, and parking areas shall be designed and located to fit harmoniously with the natural environment and to minimize the necessity for removing trees, native vegetation, and soil, or the addition of fill. Site clearing shall not be permitted beyond what is necessary to provide locations for structures, driveways, parking, or small yard areas not visible from the street.

- B.** The Developer is reminded that the Zoning Ordinance requires landscaping and bufferyards and that sufficient space on each lot should be provided to accommodate these requirements.

C. Applicability

Unless otherwise exempted, this section shall apply to:

1. Undeveloped land
2. All property to be redeveloped including additions and alterations, but not including interior or exterior alterations that do not change the footprint of the building and do not require the removal of trees, and
3. Gas well drilling sites, development and pipelines

D. Exemptions:

1. Developments that have a completed application on file for a preliminary or final plat or building permit, whichever is applicable, as of the effective date of this ordinance.
2. Any development for which construction has begun on infrastructure improvements pursuant to a City-approved development agreement as of the effective date of this ordinance.
3. Property of less than one acre on which a single family residential dwelling exists.

4. Trees located within the visibility triangle as defined on a plat of record or under Section 16.28.015.C of the Subdivision ordinance.
5. Public utilities may be exempted from these requirements upon filing a route plan prior to the removal of trees or initiation of construction which satisfactorily demonstrates that the proposed installation lies within an existing easement recorded prior to the effective date of this ordinance.
6. Public utilities have the right to trim, cut and/or remove any trees that:
 - a. Interfere with or encroach upon the operations of existing public utilities, or
 - b. create a safety issue for utility crews, or
 - c. create a safety issue for the public.
7. Nursery trees that are planted and growing on the premises of a wholesale nursery that are intended for sale in the ordinary course of business.
8. Any tree determined by a qualified professional (certified arborist, registered landscape architect, or qualified botanist) to be diseased, dying, dead, creating a public nuisance or damaging a foundation.
9. Any tree determined to be causing a danger or be in a hazardous condition as a result of a natural event such as a tornado, storm, or flood that endangers the public health, welfare or safety and requires immediate removal.
10. Clearing of understory trees and brush necessary to perform soil borings, boundary surveying of real property or to conduct tree surveys and inventories as long as the clearing for surveying shall not exceed a width of two feet (2') for a general survey (i.e. of easement boundary, etc.) and eight feet for a survey of property boundary lines. No tree having a ten-inch (10") diameter at breast height (dbh) or greater shall not be removed under this exemption.
11. Capital improvement projects.

E. Tree Designations

1. Protected Trees – Any healthy tree with an eighteen inch (18") or greater dbh and not in a Quality Tree stand or a Mesquite, Bois d'Arc, Locust Hackberry and or Cottonwood. All trees greater than eighteen inches (18") shall be considered a Protected Tree unless a detailed tree inventory is submitted by the applicant verifying that it is a Mesquite, Bois d'Arc, Locust Hackberry, or Cottonwood.
2. Quality Trees – All healthy trees that have a dbh that is greater than six inches (6"), but is less than eighteen inches (18") and not within a Quality Tree Stand shall be considered a Quality Tree. All trees shall be considered quality trees unless a detailed tree inventory is submitted by the applicant identifying the tree as a Secondary Tree.
3. Quality Tree Stands – Three or more contiguous Quality Trees whose canopies are generally clustered together creating a contiguous drip line. All tree stands shall be considered Quality Tree Stands unless a detailed tree inventory is submitted by the applicant identifying the tree stand as a Secondary Tree Stand.
4. Large Secondary Trees – All healthy Mesquite, Bois d'Arc, Locust Hackberry and/or Cottonwood trees with an eighteen inches (18") or greater dbh.
5. Secondary Trees – All healthy Mesquite, Bois d'Arc, Locust Hackberry and/or Cottonwood trees that have a dbh that is greater than six inches (6") but less than eighteen inches (18").
6. Secondary Tree Stands – Three or more contiguous Secondary Trees whose canopies are generally clustered together creating a contiguous drip line. A Secondary Tree Stand must consist of at least eighty percent (80%) of Secondary Tree species.

F. Permit required

1. No person, directly or indirectly, shall intentionally cut down, destroy, remove or move, or intentionally destroy or damage any Quality Tree or Protected Tree without first obtaining a tree removal permit and complying with the requirements of this Ordinance.

2. No grading or excavation permit shall be issued and no grading shall take place on any undeveloped property that contains trees subject to this section without first obtaining a tree removal permit or demonstrating that a tree removal permit is not required.
3. No heavy equipment shall be moved onto a site prior to all applicable permits being issued.
4. Trees greater than six inches (6") dbh and not defined as a Quality Tree or Protected Tree within this subsection may be removed with a permit.
5. Trees less than six inches dbh and not identified as a Historic Tree may be removed without a permit.
6. A permit is required for the removal of five or more trees on a single-family lot.

G. Permit Review and Approval Process

1. A request for a tree removal permit shall be submitted and approved prior to the removal of any Quality Tree or Protected Tree in the City. Permits shall not be unreasonably withheld by the City.
2. A complete application shall be submitted along with the application fee, if required. The fees shall be established by the City Council and published in Chapter 1.12 of the Benbrook Municipal Code.
3. Tree Inventory Plan and Tree Replacement/Mitigation Plan Required: The applicant shall prepare and submit a drawing showing the location and species of each tree with a trunk greater than six inches in diameter measured at a point four-and-one-half feet (4½') above the ground. In areas of dense vegetation that are proposed to be undisturbed, an outline of the vegetation may be shown. The plan shall be prepared by a registered landscape architect, urban forester, botanist, arborist, or professional land surveyor that has documented completion of at least eight (8) hours of training in Texas tree identification. The tree survey shall be submitted prior to, or along with the Preliminary Plat application, grading permit, or building permit application.
4. Tree removal permits shall be valid for a period of 180 days.
5. Upon request of the applicant, the Planning Director shall be authorized to work with the owners, developers, and builders to make non-substantive changes, within the scope of this ordinance, to plans, permits, and other requirements throughout the development and construction processes that will provide the greatest reasonable tree survival. The decision of the Planning Director may be appealed by the applicant to the Planning and Zoning Commission.
6. The applicant may file an application for relief from the Tree Preservation/Mitigation requirements to the Planning and Zoning Commission.

H. Preservation

The following requirements for tree preservation and protection shall apply unless an application for relief has been submitted by the applicant and approved by the Planning and Zoning Commission:

1. Any tree designated as a Protected Tree or a Large Secondary Tree shall be preserved unless mitigation is provided under the requirements of Subsection I below.
2. The minimum percentages of all dbh or percentage tree canopy of Quality Trees, Quality Tree Stands, Secondary Trees, or Secondary Tree Stands that must be preserved as shown in Table 16-A1. Any request to preserve less than the required amount must be approved by the Planning and Zoning Commission.
3. All percentages relating to preservation stated within this Section shall be based on the initial tree inventory plan. Any subsequent redevelopment of property must minimally preserve the applicable percentage of the total dbh of quality trees by the initial tree survey.
4. A notation shall be placed on the Site Plan or Final Plat identifying each Protected Tree, Quality Tree, Quality Tree Stand, Large Secondary Tree, Secondary Tree and/or Secondary Tree Stand required to be preserved under this Subsection. The notation shall limit any future unauthorized land disturbing activity or construction that would impact and/or damage the

the tree(s) to be preserved or protected.

**Table 16-A1
Preservation Requirements for All Lots
(See Table 16-A2 for mitigation requirements.)**

Ratios indicate number of caliper inches removed to caliper inches replaced)

Lot Size	Protected Trees	Quality Tree & Quality Tree Stands	Large Secondary Trees	Secondary Trees
Less than ½ acre	None	None	None	None
½ acre to 1 acre	A minimum of 50% of protected trees must be preserved.	A minimum of 5% of Quality Trees must be preserved.	A minimum of 5% of large secondary trees must be preserved.	None
1 acre to 2.5 acres	A minimum of 60% of protected trees must be preserved.	A minimum of 10% of all Quality Trees & Tree Stands preserved in Single-family & Duplex Dwelling developments: A minimum of 12.5% in Multi-family & Non-residential developments	A minimum of 10% of all Large Secondary Trees must be preserved.	A minimum of 5% preserved in Single-family & Duplex Dwelling developments: A minimum of 6.25% preserved in Multi-family & Non-residential developments.
Greater than 2.5 acres	A minimum of 70% of protected trees must be preserved.	A minimum of 20% preserved in Single-family & Duplex Dwelling developments: A minimum of 25% preserved in Multi-family & Non-residential developments	A minimum of 20% of protected trees must be preserved.	A minimum of 10% preserved in Single-family & Duplex Dwelling developments: A minimum of 12.5% preserved in Multi-family & Non-residential developments.

5. To preserve the required mandatory areas of natural vegetation landscape from inadvertent damage during construction, a physical barrier shall be erected around the perimeter of these inviolate areas. The barriers will be in place and approved by the City Inspector before any site clearance can commence. The barrier may consist of a temporary chain link fence, wooden stake, (snow) fence, plastic safety fence or other devices as approved by the City Inspector. Minimum height of all types of barriers is four feet (4'). Barriers shall remain in place until the final building and landscape site inspections are satisfactorily completed for the issuance of the certificate of occupancy. Only after this time can the barriers be removed.

I. Mitigation

If preservation cannot be reasonably achieved, then the following mitigation standards shall apply.

1. Protected Trees and Large Secondary Trees may be removed if mitigated as required on Table 16-A2.

**Table 16-A2
Mitigation Requirements for All Lots**

(Ratios indicate number of caliper inches removed to caliper inches replaced)

Lot Size	Protected Trees	Quality Tree & Quality Tree Stands	Large Secondary Trees	Secondary Trees
Less than ½ acre	If removed, mitigated at a 1:0.5 ratio	If removed, mitigated at a 1:0.25 ratio.	If removed, mitigated at a 1:0.25 ratio	None
½ acre to 1 acre	If removed, mitigated at a 1:1 ratio	If removed, mitigated at a 1:0.5 ratio	If removed, mitigated at a 1:0.5 ratio	None
1 acre to 2.5 acres	If removed, mitigated at a 1:1.5 ratio	If removed, mitigated at a 1:1 ratio.	If removed, mitigated at a 1:0.75 ratio	If removed, mitigated at a 1:0.5 ratio.
Greater than 2.5 acres	If removed, mitigated at a 1:2 ratio	If removed, mitigated at a 1:1.5 ratio.	If removed, mitigated at a 1:1 ratio	If removed, mitigated at a 1:0.75 ratio.

2. Quality Trees, Quality Tree Stands, Secondary Trees and Secondary Tree Stands may be removed in excess of the minimum preservation requirement provided the excess removal is mitigated as required on Table 16-A2.
3. Each replacement tree shall be a minimum of two-inch (2") caliper measured six inches (6") above grade and at least five feet (5') in height when planted.
4. If trees are planted as mitigation under this subsection, the developer shall post a three-year maintenance surety bond, cash bond, or letter of credit meeting the requirements under Section 16.24.010 for the cost to replace the trees. Upon completion of the three-year landscape establishment period for replacement trees, the City shall inspect the trees and determine whether ninety percent (90%) of the trees are healthy and have a reasonable chance of surviving to maturity. Upon such a finding, the City shall release the currency, bond or letter of credit. In the absence of such a finding, the applicant shall be notified to replace any unhealthy or dead trees. If the applicant does not take remedial steps to bring the property into compliance, the City shall make demand for payment on the cash bond, surety bond, or letter of credit. The City may use all legal remedies to enforce this Subchapter in addition to making demand on the security provided herein.
5. **Money in Lieu of Tree Mitigation**
 - a. Subject to the approval of the Planning and Zoning Commission, a land owner/developer responsible for tree mitigation under this Section may elect to meet the requirements, in whole or in part, by a cash payment in lieu of tree replacement. The payment shall be on a caliper-inch unit cost as established by the City Council in Chapter 1.12 of the Benbrook Municipal Code. Cash payment shall be deposited in the Tree Fund and be used to purchase and install trees within the City.
 - b. The City hereby establishes a Tree Fund which will serve as a depository for any payments-in-lieu under this subsection. The City shall administer the Tree Fund. Tree funds shall be used to purchase, plant and maintain trees on public property, to preserve wooded property that remains in a naturalistic state in perpetuity, to perform and maintain a city-wide tree inventory and to educate citizens and developers on the benefits and value of trees.
 - c. The applicant shall pay the fees for tree removal established by City Council in Chapter 1.12 of the Benbrook Municipal Code. The fee shall be based on the fair market value of materials and labor at the time of planting and the reasonable estimated cost for maintenance and irrigation for a period of three (3) years.

- d Fees contributed to the Tree Fund shall be paid prior to the issuance of a Grading Permit on all Commercial, Industrial, or Multi-family Residential developments, prior to final approval of a Gas Well Drilling Permit and prior to filing a Final Plat in the Tarrant County Clerks Office for all Single-family Residential Subdivisions.
- e Voluntary contributions for tree preservation shall be placed in the Tree Fund.

6. Alternative Tree Preservation Plan

An applicant may propose an Alternative Tree Preservation Plan which meets or exceeds the goals and objectives of this Subchapter but does not meet the standards of this Subchapter. The Alternative Tree Preservation Plan provides the option to address the criteria through a flexible process which must be reviewed and approved by the Planning and Zoning Commission.

- a. Criteria for Approval – The goals and objectives which must be met, and by which the proposal will be judged are:
 - 1) The proposed Alternative Tree Preservation Plan adequately achieves, or is an improvement on, the intent of the requirements of this Subsection.
 - 2) Assure quality development that fits in with the character of Benbrook.
 - 3) Preservation Incentives
- a. Tree Credits
 - 1) All Quality Trees and Quality Tree Stands that are preserved beyond the minimum requirements identified in Table 16-A shall be credited towards the landscape canopy requirements identified in the Zoning Ordinance using Table 16-B below.
 - 2) All Quality Tree Stands with existing understory that are preserved beyond the minimum requirements identified in Table 16-A, shall be credited towards landscape requirements at a ratio of 1:2.
 - 3) Unless trees preserved are an integral part of the parking lot design, they will not be credited towards parking lot landscaping requirements.
 - 4) Unless trees preserved are an integral part of a required buffer design, they will not be credited towards bufferyard landscaping requirements.

**Table 16-B
Credit Received Toward Landscape Canopy Requirements for Preservation beyond Minimum Requirements Identified in Table 16-A**

Tree Classification	Credit Ratio
Quality Tree	1:1.3
Quality Tree – Oak Species	1:1.5
Quality Tree Stands without understory	1:1.55
Quality Tree Stands consisting of a minimum 90% Oak Species	1:1.75
Quality Tree Stands with understory	1:1.8
Quality Tree Stands consisting of a minimum 90% Oak Species with understory	1:2

b. Parking Spaces

For every twelve inches (12") of dbh of Quality Tree(s) that have been protected on site, beyond the minimum requirements identified in Table A and Table B, one (1) parking space may be subtracted from the required number of parking spaces up to a fifteen percent (15%) decrease.

c. Parking Lot Design

The Director of Planning may allow parking lot design and parking lot landscaping requirements to vary from adopted standards to preserve existing trees.

J. Enforcement

1. The Building Official, or an authorized representative of the City shall have the authority to place a Stop Work Order on any activity involving the removal of Protected Tree(s), Protected Tree Stand, Quality Tree(s), or Quality Tree Stand(s), or that may otherwise endanger trees contrary to the provisions of this Subsection. The Building Official may deny all Permits and Certificates of Occupancy for any site which is not in compliance with this Subsection.
2. A person may be held criminally responsible for a violation of this Subsection if the person intentionally removes, assists in the removal or causes the removal of a tree without complying with the requirements of this Subsection or owns part or all of the land where the violation occurs.
3. Each tree removed in violation of this Subsection shall constitute a distinct and separate offense.
4. Each tree preserved or planted under this Subsection that is removed, destroyed or dies within three (3) years of approval shall constitute a distinct and separate offense.
5. It shall be an affirmative defense that trees are injured or destroyed by natural causes, natural disasters, including but not limited to tornadoes, straight-line winds, ice storms, fire, floods, hail, or lightning strikes, or through the independent unauthorized actions of third parties.
6. In addition to the penalties provided in Section II-Penalty Clause of the Subdivision Ordinance (Ordinance 1203, as amended), the City may also seek damages equivalent to the replacement costs of the trees that were removed or destroyed without authorization."

16.28.015 LAND UNSUITABLE FOR SUBDIVISION

Any land that is subject to a 100-year flood in its natural state shall not be developed.

16.28.020 EASEMENTS

A. General Policy

1. Easements should normally be provided along the front, rear or side lot lines.
2. Utility easements shall be a minimum of ten feet (10') in width, unless otherwise specified in this Ordinance or approved by the City Planner.
3. A ten-foot (10') utility easement shall be required adjacent to street rights-of-way to accommodate the location of underground and overhead utilities according to standardized

locations promulgated by the City Manager and the Tarrant County Utility Coordinating Council.

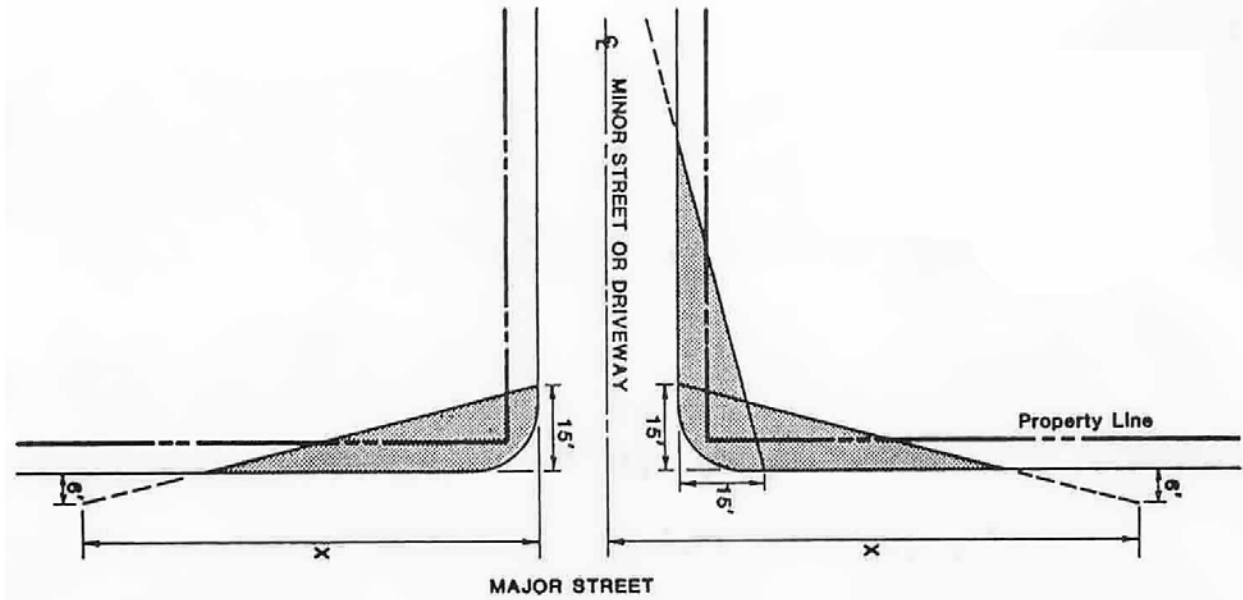
4. Easements can be required by the City to be highly restrictive. In such cases the City will draw the easement instrument to be executed by the subdivider prior to approval of the Plat.
5. When the City finds that easements in areas adjoining a proposed subdivision are necessary to provide adequate drainage or to provide utilities, the subdivider shall obtain such easement.
6. Drainage easements shall generally be located along the existing drainage way and should be of sufficient width for the designed improvements to be installed and enough extra width for maintenance equipment to be able to work.
7. All drainage easements shall be so designed to allow maintenance equipment to enter the easement and be able to perform the necessary work.
8. Employees of the City of Benbrook and its agents shall have the authority to enter premises at any time for the purpose of inspecting, repairing or constructing improvements or premises within any easement.

B. UTILITY EASEMENTS

1. Any franchised or authorized public utility, including the City of Benbrook, shall have the right to move and keep moved all or part of any building, fences, trees, shrubs, other growths or improvements which in any way endanger or interfere with the construction, maintenance, or efficiency of its respective systems in any of the easements shown on the plat; and any public utility, including the City of Benbrook, shall have the right at all times of ingress and egress to and from and upon said easements for the purpose of construction, reconstruction, inspection, 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.
2. All easements which will be used for water and/or sewer facilities, or which may potentially be used in the future for water and/or sewer facilities shall be a minimum of fifteen feet (15') in width. Easements may be greater or lesser than fifteen feet (15') in width as required by the Benbrook Water Authority.

C. PUBLIC OPEN SPACE RESTRICTION

1. A triangular Public Open Space Easement (P.O.S.E.) is required on corner lots at the intersection of two streets (including alleys and private streets.) The triangles shall be described as starting at a point 15 feet (15') behind the curb line on the intersecting street and extending along the street a distance of 10 feet (10') for every mile per hour of posted speed (10'/mph) to a point six feet (6') inside of the curb line (see Figure below.) Two triangles are required on each leg of the intersection.
2. These open space easements will remain in effect unless vacated by ordinance adopted by the City Council of Benbrook.



D. DRAINAGE EASEMENTS

Where a subdivision is traversed by a watercourse, drainage way, natural channel or stream, there shall be provided an easement or right-of-way conforming substantially to the limit of such watercourse, plus additional width to accommodate future needs as determined by the Comprehensive Plan and the City Manager. Natural waterways and channels should be used wherever practical to carry run-off. Any modification to an existing waterway and channel requires approval by the City Engineer and City Manager.

1. Storm drainage easements of fifteen feet (15') minimum width shall be provided for existing and proposed enclosed drainage systems. Easements shall be centered on the systems. Larger easements, where necessary, shall be provided as directed by the City Engineer.
2. Storm drainage easements along existing or proposed open channels shall provide sufficient width for the required channel and such additional width as may be required for ingress and egress of maintenance equipment; to provide clearance from fences and space for utility poles; to allow maintenance of the channel bank; and, to provide necessary slopes along the bank.
3. Where topography or other conditions are such as to make impractical the inclusion of drainage facilities within road rights-of-way, perpetual unobstructed easements for such drainage facilities shall be provided across property outside the road right-of-way lines and with satisfactory access to the road. Easements shall be indicated on the plat. Drainage easements shall be carried from the road to a natural watercourse or to other drainage facilities.
4. When a proposed drainage system will carry water across private land outside the subdivision, appropriate drainage rights must be secured and indicated on the plat or other instrument as approved by the City Attorney. In the case of clear public interest, the City may participate in easement acquisition by power of condemnation.
5. The applicant shall dedicate an appropriate drainage easement either in fee or by drainage easement or by conservation easement of land on both sides of existing watercourses to a distance to be determined by the City Engineer.

6. Easements for storm drainage facilities shall be provided at locations containing proposed or existing drainage ways.
7. Storm drainage easements shall be provided for emergency overflow drainageways of sufficient width to contain within the easement storm water resulting from a 100-year frequency storm less the amount of storm water carried in an enclosed system of a capacity required by the City of Benbrook.
8. The width of the easements shall be substantiated by a drainage study and drainage calculations or other criteria submitted to and approved by the City Engineer.
9. Floodplain Easements

Floodplain easements shall be provided along natural drainageways and lakes or reservoirs. Floodplain easements shall encompass all areas beneath the water surface elevation resulting from a storm whose design frequency is 100 years (or a one-percent annual probability), plus such additional width as may be required to provide ingress and egress to allow maintenance of the banks and for the protection of adjacent property, as determined and required by the City Engineer.
10. Detention area easements shall be provided that completely encompass the pond and associated improvements. Detention ponds on nonresidential property shall be maintained by the property owner's association, unless otherwise approved by the City.

E. Access Easements

1. Emergency access easements and fire lanes will be provided where required by the Fire Marshal or the Planning and Zoning Commission and shall be a minimum of twenty feet (20') in width, have a minimum height clearance of fourteen feet (14'), and have a minimum inside turning radius of twenty-five feet (25'). Any emergency access and fire lane easement more than one hundred (100) feet in length shall either connect at each end to a dedicated public street or be provided with a cul-de-sac having a minimum diameter of eighty (80) feet with an additional distance of ten (10) feet on all sides clear of permanent structures. These easements shall be paved to Design Standards and Specifications recommended by the City Engineer.
2. Cross access easements shall be required from one commercial lot to the adjacent commercial lot to allow circulation without entering the public street.

16.28.025 STREETS

A. General

1. Street Layout: The arrangement, classification, character, extent, width, grade and location of all streets shall conform to the Thoroughfare Plan and the official street construction standards and shall be designed in accordance with the following provisions: Adequate streets shall be provided by the subdivider and the arrangement, character, extent, width, grade and location of each shall conform to the Comprehensive Plan of the City and shall be considered in their relation to existing and planned streets, to topographical conditions, to public safety and convenience, and in their appropriate relationship to the proposed uses of land to be served by such streets. The street layout shall be devised for the most advantageous development of the entire neighborhood.

2. **Relation to Adjoining Street System:** Where necessary to the neighborhood pattern, existing streets in adjoining areas shall be continued, and shall generally be as wide as such existing streets in alignment therewith.
3. **Projection of Streets:** Where adjoining areas are not subdivided, the arrangement of streets in the subdivision shall make provision for the proper projection of streets into such un-subdivided areas.
4. **Boundary Streets:** When land proposed to be subdivided is partially or totally bounded on one or more sides by a street or thoroughfare having a right-of-way width of less than that specified in this Section, additional right-of-way shall be dedicated to provide one-half of the ultimate right-of-way width. A half street along adjoining property that has not been subdivided may be shown on the general development plan of an entire subdivision, but no lots fronting upon such half street shall be included in the subdivisions that are approved. Half streets shall be prohibited, except where essential to the reasonable development of the subdivision in conformity with the other requirements of these regulations, and where the Commission finds it will be practicable to require the dedication of the other half when the adjoining land is subdivided. The other half of the street shall be platted within the adjacent tract at the time it is platted. When land proposed to be subdivided is partially or totally bounded on one or more sides by a street way or thoroughfare having a width of less than that specified in this Section, such land shall be laid out so as to provide street widths specified herein.
5. **Streets on Comprehensive Plan:** Where a subdivision embraces a street as shown on the Comprehensive Plan of the City, such street shall be platted in the location and of the width indicated by the Comprehensive Plan.
6. **Design of Local Streets:** Local streets shall be laid out so as to serve only local traffic and to discourage their use by through traffic. Local streets in residential subdivisions shall be designed in a curvilinear manner, except when:
 - a) In the determination of the Planning and Zoning Commission, the shape or topography of the subdivision, or existing pattern of the adjacent street would make the provision of such curvilinear streets impractical; or,
 - b) The subdivision is part of and conforms to an unexpired Preliminary Plat approved prior to the adoption of this Ordinance and the Design Standards and Criteria.
7. **Adequate Access:** To insure adequate access, there should be at least two (2) planned points of ingress and egress to each subdivision with more than 20 lots.
8. **Access to Collectors and Arterials:**
 - a) Residential Access – Individual lot access to arterials and collectors for subdivisions zoned A, B, BR, C, or CR shall be prohibited. Lot access to minor collectors shall be prohibited unless specifically approved by the City. The design should provide a minimum number of access points to collector streets.
 - b) Where a residential subdivision borders on or contains an existing or proposed arterial, the Planning and Zoning Commission shall require that access to such streets be limited where possible by:
 - a) the subdivision of lots so as to back onto the arterial and front onto a parallel local street with no access from the arterial;

- b) providing a series of cul-de-sac, U-shaped local streets, or short loops entered from and designed generally at right angles to a parallel street, with the rear lot lines of their terminal lots backing into the arterial;
- c) lots to side onto the arterial with a non-access restriction on the arterial side;
- d) reverse frontage with screening and containing a non-access restriction along the rear property line; or
- e) other treatment as may be necessary or required for adequate protection of adjoining properties, and as approved, by the Commission after taking into consideration the proposed method of off-street parking and maneuvering which will prevent the necessity of backing into the arterial.

Subdivisions serving areas in a single-family residential zoning district that abuts on or contains an existing or proposed arterial or collector street should be designed so that direct vehicular access from any lot to such street is prohibited. The design should provide a minimum number of access points to collector streets.

- 9. Arterial Intersections – Wherever possible, arterials should be intersected only by collector streets or other arterials, rather than local streets. No off-sets at the intersection of two (2) collector streets and/or arterials shall be permitted. There shall be a minimum of six hundred feet (600') between intersections of arterials and/or collector streets.
- 10. Relation to Lots – All streets should be planned so that all resulting lots shall be sufficient size and shape to conform to applicable zoning regulations. Streets should be platted to allow two (2) tiers of lots between streets when possible.
- 11. Street Right-of-Way – The subdivider shall be required to dedicate appropriate right-of-way for all streets required within or abutting said subdivision in accordance with the adopted Thoroughfare Plan and Tables 16.1 and 16.2.
- 12. Visibility Triangles – Visibility triangles in the form of Public Open Space Easements (P.O.S.E.) shall be provided at the intersection of all public streets and the intersection of all public streets and alleys and/or private streets as required in Paragraph 16.28.020.C above. The easement shall prohibit any obstruction within the easement from a height of twenty-four inches (24") to a height of eleven feet (11') above the top of the adjacent curb. Utility poles and guy wires may be located in the P.O.S.E. Other ground mounted electrical and communication equipment and switch gear may be located within the P.O.S.E. when the location is coordinated with the City Planner.
- 13. Street Names – Names of new streets shall not duplicate or cause confusion with the names of existing streets, unless the new streets are a continuation of, or in alignment with existing streets, in which case names of existing streets shall be used. Streets shall be named to provide continuity with existing streets. All streets shall be named and the name approved before the Final Plat is submitted. Final approval of street names shall be by the City Planner.
- 14. The reservation in private ownership of strips of land at the end of proposed or existing streets and intended solely or primarily for the purpose of controlling access to property not included in the subdivision shall be prohibited.
- 15. Each subdivision shall have a street connectivity index of at least 1.4, unless otherwise approved by the Planning and Zoning Commission.

B. Street Costs and City Participation

The owner or developer shall be responsible and pay all costs for the design and construction of streets within the proposed development. The developer shall build these streets in accordance with City standards.

C. Traffic Impact Analysis Required

Five (5) copies of a Traffic Impact Analysis (TIA) shall be required for any development that will generate more than one hundred (100) trips per peak hour using data from the most recent edition of Trip Generation published by the Institute of Transportation Engineers. In general, this includes any development with more than 100 dwelling units or shopping area with more than 20,000 square feet of floor area. Traffic Impact Analysis studies shall be prepared by a qualified traffic engineer using generally accepted techniques. The study shall include, as a minimum:

1. analysis of existing traffic levels (some data is available from the City),
2. trip generation and distribution of proposed development,
3. capacity analysis and Level of Service on affected roadways,
4. identification of traffic impacts, needs and deficiencies, and
5. recommendations for site access and off-site improvements.

As a general policy, the City of Benbrook has adopted the Level-of-Service C as the minimum acceptable congestion level for Benbrook roadways. Review and approval of the Traffic Impact Analysis and any required improvements shall be made by the City Engineer.

D. Design Requirements

Design requirements are summarized in Tables 16.1 and 16.2. All streets shall have curb and gutter for drainage control. Curb, gutter and paving requirements for streets, unless otherwise specified, shall follow the Standard Specifications for Public Work Construction (latest edition) of the North Central Texas Council of Governments.

1. Pavement Widths

Streets shall be designed to the width required by the Thoroughfare Plan, Tables 16.1 and 16.2 or as may be specified by the Planning and Zoning Commission. All pavement widths shall be measured from the face of one curb to the face of the opposite curb. Wider pavement widths shall be provided when required by the Planning and Zoning Commission to handle increased or unusual traffic conditions.

2. Street Section

The City of Benbrook's minimum street section for a local residential street shall be not less than six inches (6") of lime stabilized subgrade and six inches (6") of reinforced concrete, with a minimum crown of five inches (5"). The minimum section for collector and arterial streets is six inches (6") of lime or cement- stabilized subgrade and seven inches (7") reinforced concrete with concrete curb and gutter. As a part of the soils test for determining lime or cement content, a pavement design shall be provided for arterials. The design shall be in accordance with AASHTO Guidelines and shall be based upon a 20-year design life. Commercial and industrial-use roadways shall have a minimum section of six inches (6") of lime or cement stabilized subgrade and seven inches (7") of concrete with concrete curb and gutter. A pavement design shall be provided for commercial and industrial use roadways. A parabolic crown shall be provided in accordance with the City's standard details. Any concrete for street sections shall have a minimum compressive strength of 3600 pounds per square inch (psi) (5-½ sack). The City Engineer may require more stringent design

**TABLE 16.1 CITY OF BENBROOK, TEXAS
SUMMARY OF STANDARDS
FOR PRIMARY AND SECONDARY MAJOR ARTERIALS**

	PRIMARY ARTERIALS		SECONDARY ARTERIALS	
	PD6 DIVIDED	PU6 UNDIVIDED	M4D DIVIDED	M4U UNDIVIDED
1. Pavement Width (feet) (Face to face)	2-36	72	2-24	48
2. Minimum Pavement Section ¹				
a. Stabilized Subgrade (inches)	6	6	6	6
b. Concrete pavement (ins)	8	8	7	7
3. Number of Traffic Lanes	6	6	4	4
4. Lane widths (feet)	12	12	12	12
5. Right-of-way width (feet)	120	110	90	80
6. Vehicle Capacity Policy (Vehicles/hr:vehicles/day)	2700/ 30,000	2100/ 23,000	1400/ 16,000	1266/ 12,600
7. Design speed (mph)	45	40	40	40
8. Minimum grade (%)	0.5	0.5	0.5	0.5
9. Maximum grade (%)	7	7	7	7
10. Minimum Centerline Radius (feet)	750	750	500	500
11. Stopping Sight Distance (feet)	275	275	275	250
12. Minimum Median Width (feet)	16	n/a	14	n/a
13. Minimum Spacing Median Opening (feet)	400	n/a	400	n/a
14. Minimum Radius for curb returns at Intersection (feet)	35	35	20	20
15. Reverse curve Separation Minimum (feet)	100	100	100	100

Notes: 1. A pavement design shall be provided to determine if a section greater than the minimum is required.

**TABLE 16.2 - CITY OF BENBROOK, TEXAS
SUMMARY OF DESIGN STANDARDS
FOR COLLECTOR AND RESIDENTIAL STREETS**

	COLLECTOR STREETS	LOCAL STREETS		
		ONE-FAMILY RESIDENTIAL	ONE-FAMILY RESIDENTIAL (RURAL SECTION) ³	COMMERCIAL, INDUSTRIAL, AND MULTIFAMILY
1. Pavement Width (feet) (Face to face)	36	30(26 ¹)	20	40
2. Minimum Pavement Section ²				
a. Stabilized subgrade (in)	6	6	6	6
b. Concrete Pavement (in)	7	6	6	7
3. Number of Traffic Lanes	2 travel lanes, plus 2 parking lanes	2	2	2
4. Lane widths (feet)	10 travel lanes, 8 foot parking lanes	13	10	12
5. Right-of-way width (feet)	60	50	60	60
6. Vehicle Capacity Policy (Vehicles/hr:vehicles/day)	790/ 7,100	400/ 5,250	400/ 5,250	400/ 5,250
7. Design speed (mph)	35	30	30	30
8. Minimum grade (%)	0.5	0.5	0.5	0.5
9. Maximum grade (%)	7	--	--	--
10. Minimum Centerline Radius (feet)	300	--	--	--
11. Stopping Sight Distance (feet)	250	200	200	200
12. Minimum Median Width (feet)	n/a	n/a	n/a	--
13. Minimum Spacing Median Opening (feet)	n/a	n/a	n/a	--
14. Minimum Radius for curb returns at Intersection (feet)	30	20	20	20
15. Reverse curve Separation Minimum (feet)	75	--	--	--

- Notes: 1. May be used for subdivisions with lot widths 80 feet or larger.
2. The City Engineer may require a pavement design.
3. Rural design may be used on lots zoned SD, RE, or A with lot areas exceeding 11,000 SF and lot widths exceeding 80 feet. Grass-lined swales shall be designed and approved by the City Engineer.

requirements in locations of unusual soil or traffic conditions. When required, twenty-four inch (24") monolithic concrete curb and gutter shall be provided in accordance with the City's standard details. In all cases, the developer's engineer shall conduct geotechnical tests which may dictate an increase in the pavement section. Any deviations from the typical sections shall require the approval of the City Engineer.

The developer's engineer shall provide soil tests to determine by recommendation of a reputable soil testing laboratory the degree of lime stabilization of the subgrade is needed in conjunction with the reinforced concrete pavement. The recommendations shall address the percentage (%) of lime to be applied. As a part of the soils test for determining lime or cement content, a pavement design shall be provided for arterials, industrial and commercial streets. The design shall be in accordance with AASHTO Guidelines and shall be based upon a 20-year design life. A pavement design shall be provided for commercial and industrial use roadways. A parabolic crown shall be provided in accordance with the City's standard details. The distance between expansion joints shall not exceed 600 feet.

All materials furnished for the paving of streets and all construction methods shall fully conform to the appropriate sections of the Standard Specifications for Public Works Construction (NCTCOG).

Curb and gutter shall be constructed as detailed and specified in the Standard Specifications for Construction.

3. Street Alignment – A curved street pattern that follows the topography is preferred to a grid pattern imposed upon the land. This provides use of the streets for drainage purposes, a more interesting pattern of development, and slows traffic driving through residential neighborhoods. Streets should traverse the topography in the following manner:
 - a) Cross streams and drainage ways at a right angle; this minimizes bridge and culvert costs.
 - b) Streets on sloping terrain should gradually cross hills rather than directly up and down.
 - c) Cul-de-sacs and loop streets should curve with the flow of the topography to best handle drainage.
 - d) Where possible, drainage should be away from the cul-de-sac or loop street.
 - e) Property boundaries should not serve as the primary basis for street layout, with other property features (topography, soils, vegetation, etc.) serving as the overall guide.

4. Intersections – Intersections shall be designed to as near right angles as possible and in no case shall vary from ninety degrees by more than 5 degrees without specific authorization by the Planning and Zoning Commission. Curb returns at intersections shall be in accordance with Tables 16.1 and 16.2. If the intersection angle between any two streets varies by more than 5 degrees from a right angle, the minimum curb return shall be determined and approved by the City Engineer.

Wherever possible, street jogs with center line off-sets of less than one hundred fifty feet (150') for local streets shall be avoided. No street jogs or off-sets are permitted for collector or arterial streets.

Intersections should have only two streets intersecting at right angles. This provides the safest type of intersection. Other types of intersection include:

- a) "T" Intersection - These are useful for discouraging through traffic and should be used more than 150 feet away from any other intersection.
- b) "Y" Intersection - These occur when three streets intersect at a common point. "Y" intersections shall not be permitted.

Visibility triangles shall be provided at all street intersections, either as dedicated right-of-way or as a Public Open Space Easement. The minimum triangle shall be that provided in Section 16.28.020.C, though additional open space easement may be required when necessary to achieve the necessary sight distances. The City shall utilize the sight distance requirements established by the Institute of Transportation Engineers' Guidelines for Urban Major Street Design (1990) in making its determinations. Recommended sight distances are as follows:

Arterial streets with median	500 feet
Arterial streets without median	800 feet
Collector streets	300 feet
Minor streets	200 feet

5. Dead-End Streets, Cul-de-sacs and Loop Streets

Dead-end Streets – Dead-end streets shall be prohibited except as short stubs to permit future expansion. Such short stubs longer than one hundred thirty feet (130') in length shall be provided with an approved turnaround having a minimum radius of fifty feet (50'). Temporary dead-end street shall have provisions for future extension of the street and utilities and, if the temporary cul-de-sac is utilized, a reversionary right to the land abutting the turnaround for excess right-of -way shall be provided.

Cul-de-sacs – A street ending permanently in a cul-de-sac should not be longer than six hundred (600) feet and shall be provided at the closed end with a turn-around having an outside roadway diameter of at least eighty (80) feet, and a street property line diameter of at least one hundred (100) feet. On extra wide lots, cul-de-sacs may be longer if approved by the Planning and Zoning Commission.

When the Planning and Zoning Commission determines that there is a reasonable expectation that a dead-end street will be extended within two (2) years, construction of a temporary cul-de-sac may be approved. The Planning and Zoning Commission may waive temporary cul-de-sac requirements for dead-end streets when the street is less than two hundred (200) feet in length. The portion of the temporary cul-de-sac which will serve as an extension of the street shall be constructed in accordance with the City standards and that additional portion of the temporary cul-de-sac shall be in accordance with the City standards for a permanent cul-de-sac. "Adequate, all-weather turnaround" is defined as a turnaround that is of sufficient size to accommodate fire and sanitation vehicles and is of a construction quality comparable to standard road cross sections.

Cul-de-sacs and loop streets should drain to other streets, if possible.

6. One-Way Streets – Unless otherwise approved by the City Planner, one-way streets are prohibited in the City.

7. Minimum and Maximum Grades – Street and alley grades should conform to the natural terrain where possible and shall conform to the requirements in Table 16.1 and 16.2.
8. Horizontal Curves – Minimum and maximum horizontal curves shall be in accordance with Tables 16.1 and 16.2. These requirements may be made more stringent by the City Engineer if deemed necessary to provide minimum stopping distance, sight distance, design speeds, and other safety requirements consistent with good engineering practices.
9. Design Speeds – Unless otherwise approved by the City Council, design speeds shall be in conformance with Table 16.1 and 16.2.
10. Curbs and Gutters – Curbs shall be installed by the developer on both sides of all interior and perimeter streets. The City has adopted the seven-inch (7") high curb as the standard for all streets. In limited places where monolithic curb is not provided after approval by the City, the gutter shall be eighteen inches (18") wide. Alternative curb designs shall be approved by the City Engineer for rural section local streets.

The subgrade for curb and gutter typically shall consist of six inches (6") of lime or cement-stabilized base material. In cases where lime stabilization is not feasible, six inches (6") of mechanically compacted crushed stone or six inches (6") of 2-sack concrete ("2:27") may be used as base material. The stabilized base must extend six inches (6") beyond the curb and gutter.

The curb and gutter shall be constructed monolithically in accordance with the City's standard details and Standard Specifications. Concrete shall be 5-sack, 3600 psi design with two #3 steel bars placed longitudinally with the curb and gutter. Joints shall be scribed in the curb and gutter at distances no greater than 12 feet and expansion joints placed at each radius or linear distances of 250 feet or less. Any pavement damaged during curb and gutter installation must be restored to meet City specifications.

All improvements shall be subject to inspection and approval of the City Inspector. All work shall be subject to tests as prescribed by the City Inspector, with the cost of such tests borne by the Developer or his contractor. If a test fails to meet specifications, the contractor shall bear the expense of removing the faulty section delineated by the City Inspector, reconstructing the section, and performing any subsequent tests required by the City Inspector.

Wheelchair ramps shall be provided at all street intersections, unless otherwise approved in writing by the City Engineer. Wheelchair ramps shall also be provided at driveway curb returns where the location of the curb return intersects the sidewalk and results in a barrier to handicapped access. Wheelchair ramps shall be provided in commercial and industrial parking lots that are required to provide handicapped parking spaces. All wheelchair ramps shall be constructed in accordance with the City's standard details and in compliance with ADA requirements.

11. Driveways and Median Openings

Driveways – The location of driveway ingress or egress from any lot onto a collector or arterial shall be approved by the City Inspector. Driveways shall provide a minimum of eighteen feet (18') between the property line and any garage door, gate, or other obstruction to provide for safe parking or stack space off of the public right-of-way. The location and size of all driveways serving multi-family residential, commercial and industrial properties shall be subject to the approval of the City Inspector. The City Manager shall promulgate design standards for such facilities.

- a) Residential driveway access to arterial streets: Residential driveway access to arterial streets should not be permitted except for major multiple-family "cluster" developments.
- b) Number of direct access driveways (curb cuts):

Each land owner is entitled to access to the City street and thoroughfare system; however, it is City policy to limit the number of driveways entering streets and thoroughfares to protect public safety and maintain traffic efficiency. Therefore, each landowner is entitled to only one driveway for each lot or parcel. Additional drive approaches shall be approved only when it has been determined that the additional driveway is necessary for adequate traffic circulation and that street efficiency and safety are preserved. Circle drives on one-family lots fronting on local streets will be generally permitted when the City Inspector determines that traffic safety is not hindered.

No driveway shall be located within two hundred feet (200') of the intersection of an arterial with an arterial, one hundred twenty five feet (125') of the intersection of an arterial and a collector, or seventy-five feet (75') of a street intersection of a collector and local or within fifty feet (50') of a local and local street unless no other point of access can be provided. Likewise, driveways shall be located a minimum of seventy-five feet (75') from any median opening unless the median opening directly serves the driveways. Deviations from these standards shall be allowed only upon approval of the City Planner. Except for residential driveways on local streets, driveways should be located directly opposite each other to minimize the potential points of conflict. The use of common driveways for adjacent property shall be encouraged.

Driveways entering onto access roads of controlled access highways shall be prohibited for a distance of one hundred feet (100') before the intersection of roadway surfaces on exit ramps to a point three hundred feet (300') after the intersection of the travel-ways. Driveways are prohibited for a distance of one hundred feet (100') before the intersection of travel-ways on any entry ramp to a point one hundred feet (100') beyond the intersection of roadway surfaces and otherwise meet or exceed all other requirements of the Texas Department of Transportation.

Whenever the use of any driveway approach is abandoned and not used for ingress and egress to the abutting property, it shall be the duty of the abutting property owner to restore the curb to the standards of the City.

- c) Minimum Spacing between Driveways

(1)	<u>Street Classification</u>	<u>Separation of Curb Cuts</u>
	Primary Arterials (P6D)	One per 300 feet of frontage
	Secondary Arterials (M4U)	One per 200 feet of frontage
	Collector (RC)	One per 100 feet of frontage
	Local (residential)	10-foot separation unless joint access

- (2) It is the policy of the City to discourage driveway cuts onto the major arterials of the City. Driveway cuts onto the City's major streets will be allowed only when:

- l) There is no other feasible alternative; or

- ii) Traffic engineering studies clearly show a need.
- (3) Additional driveways other than permitted in the table above will be allowed under the following conditions:
 - I) If the daily volume using one driveway would exceed five thousand (5,000) vehicles (both directions).
 - ii) If the on-site, peak-hour traffic volume exceeds five hundred (500) vehicles per hour (both directions).
 - iii) A competent professional traffic analysis shows that traffic conditions warrant more driveways. Part of this study must include data indicating volumes compared to above standards and must show how alternative arrangements, joint access, etc., will not work.
- (4) Right-turn deceleration lanes and associated additional right-of-way shall be provided when the peak hour right-turn movements exceed 40 per hour. Deceleration lanes shall be at least 100 feet long with a 100-foot transition.
- d) Sight Distance, Onsite Maneuvering and Parking Lot Design: Adequate site distance and on-site maneuvering should be available from every driveway. Any movement for which adequate sight distance is not available or any parking lot design that does not provide adequate on-site maneuvering should not be permitted., For example, if parking is within twenty-five (25) feet of the driveway for commercial or multifamily developments under three (3) acres or within fifty (50) feet of the driveway for commercial or multifamily development over three (3) acres, either the parking should be rearranged or joint access should be considered or access to another street should be sought. Adequate driveway throat length shall be provided to reduce congestion.
- e) Median Openings – If and when medians are constructed on any arterial street, spacing between median openings should be at least four hundred (400) feet. The spacing may be reduced if a competent traffic study shows that a lesser spacing will still safely and efficiently accommodate left-turn movements to existing and projected future development in the immediate vicinity.
- f) Width of Driveway Approaches
 - (1) Residential: Residential driveways to serve single car garages, carports, and/or storage areas shall be not less than ten (10) feet nor more than twenty (20) feet in width, measured at the property line. Residential driveways to serve two car garages, carports, and/or storage areas shall be not less than eleven (11) feet, not more than twenty-four (24) feet in width, measured at the property line. When residential driveways are required to serve three or more car garages, carports, and/or storage areas, the size and location of the driveway(s) shall be subject to the approval of the City Engineer, after an adequate engineering analysis of the parking, maneuvering and access requirements. A driveway should not begin less than five (5) feet from the point of tangency of the corner radius of an intersection.

Driveways shall provide a minimum of eighteen feet (18') between the property line and any garage door, gate, or other obstruction to provide for safe parking or stack space off of the public right-of-way.

The radius of all driveway returns shall be a minimum of five (5) feet. Residential driveways shall not be constructed closer than ten (10) feet apart. If permitted, low density residential driveways entering onto collector or arterial streets shall have a minimum curb return radius of ten feet (10').

Joint driveway approaches may be approved provided a letter of agreement signed by all adjoining property owners is delivered to the City Inspector or designee.

(2) Commercial, Industrial and Multifamily residential: The location of ingress and egress for all commercial, industrial and multifamily residential driveways shall be subject to the approval of the City Inspector. Driveways should not exceed sixty-five percent (65%) of the property frontage. Driveways shall have a minimum width of 12 feet for a one-way drive and 24 feet for a two-way drive. The maximum width shall not exceed thirty feet (30') unless otherwise approved by the City Inspector.

The minimum radius of a commercial, industrial or multifamily residential driveway shall be ten feet, but twenty feet may be required in most locations.

12. Private Streets, Gated Communities and Common Area Regulations

a) Intent and Purpose

It is the intent of these private street and common area regulations to:

- (1) Allow private street developments to occur within the City of Benbrook on a limited and restrictive basis;
- (2) Provide for private street developments as one type of residential development alternative to allow the City of Benbrook to expand housing types as compared to other Metroplex cities;

There shall be no required minimum or maximum acreage size and/or number of lots within private street developments. However, minimums and maximums will be evaluated on a case-by-case basis by the Planning and Zoning Commission.

The location of each private street development will be subject to the approval of the Planning and Zoning Commission on a case by case basis, based upon, among other matters, the criteria described in this Chapter. An applicant who meets the stated criteria will not be entitled to the Private Street subdivision as a matter of right, but shall only obtain approval for the Private Street subdivision at the sole discretion of the Planning and Zoning Commission, after review by City Staff.

b) Compliance with Other Laws

In order to qualify for consideration of private streets, the applicant must satisfy the criteria of the City of Benbrook Comprehensive Zoning Ordinance, as amended; the City of Benbrook Subdivision Ordinance as amended; and any other applicable codes and ordinances, as may be, from time to time amended.

Denial of approval of any private street development by the Planning and Zoning Commission shall be final and shall not be reviewable by the Benbrook City Council or Zoning Board of Adjustment.

c) Guidelines for Development

The following guidelines are to be satisfied as part of the review and approval process for all private street developments:

- (1) The area must be within the corporate limits of the City of Benbrook, or within the Benbrook Extraterritorial Jurisdiction.
- (2) The area shall be a proposed residential development, and shall be zoned solely as a residential zoning district (that is, a zoning district the stated purpose of which is to provide for primarily residential uses), except in the case of a Planned Development (PD) zoning district, in which case the area must be designated solely for residential use.
- (3) Only the following zoning districts shall allow consideration of private street developments:
 - RE - Residential Estate District
 - A - One Family District
 - B - One Family District
 - BR - One Family Reduced District
 - CR - Multiple Family Restricted District
 - C - Multiple Family District
 - D - Multiple Family District
 - PD - Planned Development District
- (4) The area may not impede a current or future development of a thoroughfare.
- (5) The area may not disrupt an existing or proposed City of Benbrook public pedestrian pathway, hike and bike trail or park.

d) General Requirements

- (1) The private street system must comply with design standards in the Benbrook Subdivision Ordinance. All rules and regulations in the Subdivision Ordinance to "public right-of-way" shall apply to private street lots, including right-of-way and street width and paving requirements, sidewalk and street lighting requirements. The Commission will entertain proposals for creative quality alternative streetscape developments that achieve the goals of adequate vehicle and pedestrian access.
- (2) The private street system shall provide perpetual access for police and other emergency vehicles, public and private utility maintenance and service personnel, solid waste collection services, the U.S. Postal Service, and government employees in pursuit of their official duties.
- (3) The type of gate or controlled access mechanism is subject to the approval by the City of Benbrook's Fire Marshall, and any corrective action shall be the responsibility of the property owners association. The City of Benbrook shall bear no responsibility or liability in connection with the removal or destruction of any gate or other controlled access mechanism while engaged in an emergency action.

e) Specific Requirements

- (1) Each private street development plat shall contain the following wording on the face of the plat. "The streets have not been dedicated to the public, for public access nor have they been accepted by the City of Benbrook as public improvements, and the streets and roadways shall be maintained by the property owners association within the subdivision, except that the streets and roadways shall always be open to emergency vehicles, public and private utility maintenance and service personnel, solid waste collection services, the U.S. Postal Service, and governmental employees in pursuit of their official duties".
- (2) All private street developments will be approved concurrent with the Final Plat. The Planning and Zoning Commission shall consider the private street development after review and recommendation by the City staff.
- (3) Easements: Private street developments shall provide the following easements:
 - i) "public utility, drainage and storm sewer" easements containing private streets and public utilities;
 - ii) additional public utility assessments required by public agencies;
 - iii) pre-existing easements unaffected by the platting process; and
 - iv) such private service easements, including but not limited to, utilities, fire lanes, street lighting, government vehicle access, mail collection and delivery access, and utility meter reading, access, as may be necessary or deemed mutually convenient by the applicant and the City.
- (4) Access – To insure adequate access to each subdivision, there should be at least two (2) points of ingress and egress, except for approved cul-de-sacs. The second entry may be designated for emergency access only.
- (5) Private Access Amenity Plan – For each private street development, a private access amenity plan shall be submitted to the City Planner for review and approval in consultation with Public Safety and other City departments. At a minimum, the private access amenity plan shall include a scale drawing showing the plan and profile of all walls, gates, entry areas, landscaping, architectural features, and signs, etc. This will provide opportunity to review proposed controlled access mechanisms, access points, landscaping, screening walls, or similar buffering barriers, and other related private street components.
- (6) The City Staff may request rendered perspectives and elevations of proposed structures, including description of proposed building materials, roof pitches, signage, and showing relationships to adjacent structures and such other items as the City staff might reasonable request (said renderings of elevation of proposed structures does not refer to residential structures, but rather to other structures that are components of the private street development).

- (7) The City staff may require additional data to amplify and clarify the private access amenity plan; such information may include, but not be limited to, fencing, access controllers, entrance areas, barriers, perimeter walls, and exterior landscaping.
- (8) No credit will be allowed for the development of private parks, not open to the public, except as may be provided in Section 16.04.045 of this Ordinance.
- (9) Except as may otherwise be provided in a PD-zoning approval, building lines shall be provided in accordance with the Zoning Ordinance from the edge of the private street lot.

f) Conversion of Public Streets to Private Streets

For existing subdivisions with public streets and rights-of-way to become private, the following procedures shall apply:

- (1) The permit application must contain the signatures of all the owners of the lots that would be part of the proposed private street subdivision.
- (2) The street right-of-way must be purchased from the City in accordance with Chapter 272 of the Texas Local Government Code. The Planning & Zoning Commission shall first review the application and forward a recommendation to the City Council. If the recommendation is favorable and the City Council concurs, the City Council shall order an appraisal of the street rights-of-way in the affected subdivision. The cost of such appraisal shall be borne by the applicants, and the appraiser's conclusion of value shall be final.
- (3) Once the conversion takes place, all of the other provisions of this Ordinance shall be applicable to the private street subdivision.

g) Relationship to the City of Benbrook Comprehensive Plan

The following components shall be elevated when reviewing potential private street developments. This evaluation will aid in logical implementation of the current City of Benbrook Comprehensive Plan and the following components may be hereafter amended.

- (1) Future Land Use Plan – Development impact on land uses, their configuration and function shall be examined as part of each request for a private street development.
- (2) The Master Park Plan – The proposed private street development shall be evaluated to assess impact of private streets on access, including ingress and egress, and continuity of the hike/bike/jogging/open space linkage system within the community, as well as the functioning of other Park Plan and trail system plan elements of the Comprehensive Plan.
- (3) Thoroughfare Plan – The proposed private street development shall be evaluated to assess its impact on the efficiency, convenience, and safe functioning and implementation of the Thoroughfare Plan element of the Comprehensive Plan.

h) Public Improvement Districts and Property Owners Associations

- (1) Public Improvement District Required – Developers proposing subdivisions with private streets shall petition the City Council for the creation of a public improvement district to maintain the private streets as provided in Chapter 372 of the Local Government Code. If the proposed development is adjacent to an existing public improvement district, the developer shall petition to be added to the preexisting district.
- (2) Property Owners Association – In lieu of the public improvement district and upon approval of the Planning and Zoning Commission, subdivisions with private streets and/or common areas and facilities may have an approved property owners association. The property owners association shall require membership by all property owners within the subdivision, and have provisions to assess and/or place liens on owners for nonpayment of street and common area maintenance dues. The Property Owners Association shall own and be responsible for the maintenance of private streets, appurtenances and common areas and facilities. The Property Owners Association shall provide for the payments of dues and assessments required to maintain the private streets and common areas. The Property Owners Association covenants and bylaws shall be approved by the City staff and City Attorney. The approved document must be filed for record contemporaneously with the filing of the Final Plat in the County records department.
- (3) Street and Common Area Maintenance Reserve Fund – The Property Owners Association covenants and bylaws shall establish a Street Maintenance Reserve Fund for the maintenance, repair and reconstruction of private streets, access controlled structures and equipment and common areas and facilities. The cost of maintenance and replacement of stormwater detention ponds may be excluded from this requirement to the extent that the City's storm water utility will provide maintenance and repairs in accordance with Administrative Regulation CD-4. This Reserve Fund shall not be commingled with any other Property Owners Association funds. Each property owner shall be assessed annually to be placed in the Street and Common Area Maintenance Reserve Fund. After five years of existence, the accumulated balance of the fund shall not be less than five dollars (\$5.00) per front foot of each lot. The formula for calculating the reserve fund may be reviewed and amended as needed upon approval by the City. The property owners association shall provide the City an audited statement of the fund's balance, upon request.
- (4) The Property Owners Association's covenants shall contain provisions that allow the City of Benbrook to assume the duty of performing the maintenance obligations should the property owners association dissolve or in any way fail or refuse to maintain its obligations. The covenants shall further provide that the City of Benbrook may use the outstanding balance in the Street and Common Area Maintenance Reserve Fund for maintenance or in the alternative, levy an assessment upon each lot on a pro rata basis for the cost of such maintenance.
- (5) Membership Requirements – Every lot owner within the development shall be a member of the property owners association.

- (6) The Property Owners Association documents shall indicate that the streets within the development are private, owned and maintained by the property owners association and that the City of Benbrook has no obligation to maintain or reconstruct the private streets or common areas and facilities. The covenants shall include the following provision.

"The property owners association shall be responsible for contacting the City of Benbrook Inspection Department every two (2) years, or as needed, from time of construction to schedule an inspection by city staff and/or their designee of the private streets or private roadways and common areas and facilities."

- (7) The Property Owners Association covenants and bylaws shall include language, approved by the City Attorney, whereby the association agrees to fully indemnify, hold harmless and defend the City, its officers, agents, and employees, from any and all claims, lawsuits, judgments, costs or causes of action of any nature whatsoever, whether real or asserted, brought for or on account of any injuries or damages to persons or property including death, resulting from or in any way connected with the construction, maintenance or operation of the private streets and common areas and facilities.

l) Conversion of Private Streets to Public Streets

- (1) Voluntary Conversion – The City of Benbrook may, but is not obligated to, accept private streets for public access and maintenance. The procedure must conform to all of the following provisions:

- i) The Property Owners Association must submit a petition signed by one-hundred percent (100%) of its members.
- ii) All of the streets and roadways must be in a condition that are acceptable to the City of Benbrook.
- iii) All access controllers and other structures not consistent with a public street development must be removed.
- iv) If any maintenance of the streets and roadways is required, the City of Benbrook may use the outstanding balance in the reserve fund for such maintenance. Any remaining balance in the fund shall be returned to the lot owners at the time the private street and/or roadway is converted back to a public street on a fair and equitable basis to be determined by the City Council.
- v) Each lot owner shall execute an instrument of dedication for filing of record, the form of which shall be approved by the City Attorney's office.

j) Design Standards

The design and construction of the infrastructure within a private street subdivision shall conform to the same rules, regulations, standards, and specifications established for public subdivisions. The City Manager or his/her designee is hereby authorized to promulgate rules, regulations, standards, and specifications for the design and construction of improvements unique to a private street subdivision. The same shall be filed with the City Secretary at least thirty (30) days before they shall

become effective. An amendment may be made from time to time, provided that the amendment is filed with the City Secretary at least thirty (30) days before it becomes effect. No such rules, regulations, standards or specifications shall conflict with this or any other ordinance of the City of Benbrook.

(1) Structures:

- i) Project perimeter fences at project entry access points, entry monuments, and access controllers, may be erected within the public utility, drainage and storm sewer easement(s), provided they do not impede the installation, maintenance, repair, or replacement of public utilities and storm sewers within the easement.
- ii) Where access controllers are a part of a larger, multipurpose structure, only that portion of the structure which functions as access controllers may encroach the building line adjacent to the private street.

k) Street lights on private streets

The developer shall submit a street lighting plan for review and comment by the City Staff. Street lighting shall generally conform to the standards in Section 16.28.045, though alternate poles and luminaries may be used that achieve the same level of illumination. It shall be the responsibility of the Property Owners Association to pay for the cost of operating the street lights on private streets.

13. Alleys

- a) Widths and Paving – Any alleys installed in commercial or industrial areas shall be not less than thirty feet (30') in right-of-way width and pavement. Alleys in residential areas are prohibited, unless specially approved by the Planning and Zoning Commission. All alley paving shall be constructed in accordance with City standards. Alleys shall be approximately parallel to the frontage of the street and shall be less than one thousand six hundred feet (1,600') in length unless specifically approved by the Planning and Zoning Commission.
- b) Intersecting Alleys or Utility Easements – Where two (2) alleys or utility easements intersect or turn at a right angle, a cut-off of not less than ten feet (10') from the normal intersection of the property or easement line shall be provided along each property or easement line.
- c) Dead-end Alleys – Dead-end alleys shall not be permitted.
- d) Commercial and Industrial Alleys – Alleys shall be provided in commercial and industrial districts where other definite and assured provisions are not made for service access, such as off street loading, unloading, parking and fire fighting access consistent with and adequate for the uses proposed. Alleys in commercial and industrial areas shall have a minimum right-of-way and pavement width of thirty feet (30') and a minimum pavement thickness of seven inches (7") of reinforced concrete pavement or eight inches (8") of HMA over six inches (6") of lime or cement stabilized subgrade. A pavement design shall be provided by the developer for commercial and industrial alleys. The minimum inside radius of any curve shall not be less than twenty feet (20').
- e) Residential Areas – Alleys are not permitted.

- f) Turnouts – Alley turnouts shall be paved to the property line and shall be at least twelve (12) feet wide at that point. The paving radius where an alley intersects an arterial shall be twenty (20) feet, and shall be ten (10) feet at intersections with all other streets.
- g) Alleys should intersect streets at right angles or radially to curved streets.
- h) In cases where two alleys intersect or turn a sharp angle, lot corners shall be platted so that a triangular area of 25 feet by 25 feet or greater, is dedicated as part of the alley for the purpose of providing a minimum radius of 30 feet to the inside edge of the alley paving.
- l) Alley paving should have a minimum grade of 0.4 percent (%) and a maximum grade of 10.0 percent (%.)

14. Traffic Control and Street Signs

The developer shall provide all street identification signs and attachment hardware for streets within the subdivision. The street identification signs shall be constructed in accordance with the requirements in the Design Standards and Criteria. The Developer shall provide poles and any necessary traffic control signs (such as stop signs) as directed by the City Engineer.

15. Sidewalks, Hike and Bike Trails and Parkways

Unless otherwise approved by the Planning and Zoning Commission, sidewalks shall be installed as follows:

- a) On the subdivision side of all arterials and collector streets adjacent to the subdivision.
- b) On both sides of all internal arterial, collector, and local streets of a subdivision.
- c) Such additional sidewalks as the subdivider may desire.
- d) Sidewalks shall be placed in the right-of-way and shall be a minimum of five feet (5') in width, but must be at least six foot (6') in width if placed at the back of the curb.
- e) Swept corner or other approved handicapped access curb ramps shall be provided at all intersections and crosswalks.

Sidewalks shall be constructed of concrete in accordance with the City Standard Specifications and in accordance with the City Standard Design Details. Sidewalks shall have a minimum pavement thickness of four inches (4") of reinforced concrete with a minimum compressive strength of 3,000 pounds per square inch. Sidewalks shall have a minimum cross slope of 0.015 foot per foot for drainage.

Parkways shall be graded with a slope not less than 0.015 foot per foot. Except as otherwise provided by City Ordinance or policy, no other structures or trees and shrubs shall be placed in the parkway. Landscaping plans for the parkways must be approved by the Benbrook Parks and Recreation Board.

Any subdivision that contains or adjoins a route for a bike trail as shown in the current Comprehensive Plan shall provide sufficient right-of-way and construct the portion of the bike trail that lies within or adjacent to the subdivision. The bike trail pavement shall be at least ten

ten feet (10') in width made of concrete to AASHTO design standards. Right-of-way dedication for this purpose may be used as a credit toward parkland dedication requirements in Section 16.04.045.

Sidewalks shall be installed at the time of subdivision construction for all commercial, industrial, and multifamily subdivisions. In single-family residential subdivisions, sidewalks for each lot may be installed by the home builder at the time of home construction during the first four (4) years after acceptance of the subdivision. At the time of Final Plat submittal, the developer shall submit a cash or performance bond (or other approved financial assurance instrument) to construct 20 percent of the required sidewalks. At the end of the four-year period, the developer shall construct the remaining sidewalks in the subdivision, or the City shall exercise the bond and construct them. The City shall refund any funds not required for sidewalk construction at the end of the four-year period.

16. Parking lots

The required number of parking and loading spaces shall be provided in accordance with the City's Zoning Ordinance. Parking shall be designed to facilitate efficient traffic movement with a minimum conflict. All parking maneuvers shall be accomplished off of public right-of-way. Off street parking layouts shall afford the driver the ability to accomplish all maneuvers to enter or exit the parking spaces on private property. Adequate stack space shall be required for entrances into parking lots to prevent congestion backing onto the arterial.

Off-street parking areas shall be maintained by the Owner.

Except for projects in the MU-Mixed Use zoning district, no new "head-in" parking is permitted, except for one and two-family residential lots. Existing head-in parking may be required to be eliminated when the City Engineer determines that prevailing traffic conditions require the elimination of existing head-in parking that makes use of public rights-of-way to correct a serious traffic hazard.

Nothing in this section shall require the changing of existing driveways and/or parking except under one or more of the following conditions:

- a) during widening and/or reconstruction of streets, the driveways will be brought into conformity with the present standards and head-in parking will be eliminated; or
- b) during new building construction or major additions and remodeling of existing buildings all driveways and parking requirements will be brought into conformity with the present standards and head-in parking will be eliminated.

Parking lots should be designed with a minimum pavement thickness of five inches (5") of 5-sack concrete with a minimum compressive strength of 3,000 pound per square inch reinforced with #3 bars on 24-inch centers in both directions over fill sand, lime or cement stabilized subgrade or equivalent. Alternative porous pavements (such as concrete pavers, grass pavers, or gravel pavers) may be considered on a case-by-case basis.

17. Fire Lanes

Fire lanes shall be constructed in accordance with the requirements for fire apparatus access roads in the International Fire Code as adopted by the City of Benbrook, unless otherwise specified herein. The location requirements for fire lanes shall be established by the City Fire Marshall. No certificate of occupancy shall be issued until the required fire lanes are constructed, inspected and approved.

Fire lanes shall have a minimum width of twenty feet (20') and shall have a minimum vertical clearance of fourteen feet (14'). The minimum inside turning radius shall be twenty-five feet (25') and the minimum outside turning radius shall be forty-five feet (45'). All dead end fire lanes exceeding one hundred feet (100') in length shall have a turn-around with minimum radius of fifty feet (50'). Fire lanes shall not have a grade exceeding ten percent (10%). Fire lanes shall be clearly marked as a fire lane and parking prohibited. Markings must be maintained at all times.

Fire lanes shall be constructed of an all-weather pavement designed and maintained to support a twelve thousand five hundred pound (12,500 lb.) wheel loading. Unless otherwise approved by the City Engineer, such pavement shall consist of five-inch (5") thick concrete pavement in light traffic areas and six-inch (6") thick concrete pavement in areas expected to receive heavy truck traffic, such as service drives. In both cases, pavement shall a minimum of 5-½ sack concrete with a minimum compressive strength of 3,600 pounds per inch reinforced with #3 bars on 24-inch centers in both directions. In both cases, concrete shall be poured over stabilized subgrade. The developer or contractor shall submit a pavement design for the fire lanes prior to construction and the construction must be inspected. The contractor shall provide test results verifying the strength of the concrete, at the direction of the City Inspector.

18. Medians

Medians shall not be constructed in dedicated public right-of-way unless specifically required by and/or approved by the Planning and Zoning Commission. Medians approved for aesthetic purposes shall be maintained by, and at the expense of, the dedicator in accordance with specific contractual arrangements with the City. Medians required for traffic control shall be designed for minimum maintenance.

16.28.030 BLOCKS AND LOTS

A. BLOCKS

1. The length of a block shall be considered to be the distance from property corner to property corner measured along the property line of the block face of greatest dimension, or on which the greatest number of lots face. The width of a block shall be considered to be the distance from property corner to property corner measured along the property line of the block face of least dimension, or on which the fewest number of lots face. The length, width and shapes of blocks shall be determined with due regard to provision of adequate building sites suitable to the special needs of the type of use contemplates, zoning requirements as to lot sizes and dimensions, and needs for convenient access, circulation, control and safety of street traffic.
2. Block lengths shall not exceed one thousand six hundred feet (1,600'), nor be less than five hundred feet (500').
3. When the length of any block exceeds one thousand two hundred feet (1,200'), the subdivider or developer shall be required to dedicate a portion of property to the City which will divide the block width-wise, so as to allow utilities, drainage, or other accommodations in the best interest of the immediate and adjacent properties. The exact width of such dedication shall be determined by the Commission.
4. Where long blocks in the vicinity of a school, park or shopping center are platted, the Commission may require a public walkway near the middle of long blocks or opposite a street that terminates between the streets at the ends of the block. If required, the walkway shall be not less than five (5) feet in width, and shall have a concrete walk of a minimum width of five

(5) feet through the block from sidewalk to sidewalk, or curb to curb, or if no street, to the property line adjacent to school, park or shopping center.

B. LOTS

1. The lot arrangement and design shall be such that all lots will provide satisfactory and desirable building sites, properly related to topography and the character of surrounding development.
2. All side lines of lots shall be at approximately right angles to straight street lines and radial to curved street lines except where a variation to this rule will provide a better street and lot layout. Rear lot lines should be straight and avoid acute angles with side yard lines. Odd-shaped lots should be avoided. Where utility easements are to be located along rear lot lines, these lines should be as straight as possible for long lengths.
3. No lot shall have less area of width at the building line than is required by the zoning regulations that apply to the area in which it is located.
4. Lots shall be consistent with zoning regulations. When the specific proposed use of a lot or tract depends upon future action by the City Council or other properly designated authority, lot lines shall also be shown on the Preliminary Plat appropriate to a use that does not require such action. Proposed uses shall be shown on the Preliminary Plat.
5. Generally lots should be deeper than they are wide. It is recommended to have the depth twice the width. The important consideration is to assure that the lots are neither too deep nor too shallow to allow for good placement of a dwelling unit on a lot.
6. Corner lots shall be wider than interior lots so that dwellings can be placed further from the street. Corner lots shall be 10 to 20 percent wider than interior lots. Lots facing onto heavy traffic streets shall be avoided. This can be accomplished by providing deeper lots with the houses backing onto the heavy traffic street. Other methods include,
 - a) providing an access street parallel to the major street,
 - b) cul-de-sac if the property has sufficient depth, or
 - c) provide a loop street, if the property has sufficient depth and width.
7. Surface drainage must be diverted away from house sites to a public right-of-way or dedicated drainage easement. Sufficient slope must exist on the lot to enable drainage to runoff from the building site across sidewalks, and onto the street. Swales may be needed to provide drainage from backyards.
8. Building Lines: Front and second front building lines shall be shown on all lots in the subdivision. The building lines shall be listed in accordance with the minimum applicable to the zoning district. Building lines on plats may exceed the minimum required by the Zoning Ordinance.
9. Orientation to Creeks and Streams: Any lots that are contiguous to the major stream channels (Mary's Creek, Clear Fork-Trinity River, Timber Creek, or Walnut Creek) shall be oriented so that their front shall face the creek across a public street.
10. Orientation to public parks: No more than fifty percent (50 %) of the boundary of a public park may be contiguous to the rear lot line of residential lots. All other residential lots must face the public park across a public street.

16.28.035 DRAINAGE

A. GENERAL

1. Conformance with Comprehensive Plan – The developer shall provide those drainage improvements which traverse or abut the proposed subdivision, where specified in the Comprehensive Plan. All cost for such improvements shall be paid by the developer, except where the City Manager shall determine that the improvements benefit other citizens more than that of the proposed subdivision and shall determine the equitable City participation in such improvements. Such City participation, or any appeal of such requirements, shall be approved by the City Council.
2. To protect health, safety and environmental quality, it shall be the policy of the City of Benbrook that no new development will be allowed within the 100-year floodplain, as delineated by the Federal Emergency Management Agency. Undeveloped land within the floodplain may be used for agricultural purposes, be incorporated into adjacent lots outside of the floodplain, or set aside as private or public open space.
3. Development shall not increase the peak flow discharge or velocities over natural conditions, particularly on adjacent and downstream properties for the 1-year, 25-year or 100-year, 24-hour storm events. When preliminary drainage studies indicates that peak flows or velocities will be increased, then detention basins or other techniques shall be designed to reduce flows to natural conditions.

B. Drainage Facilities – Drainage facilities shall be provided and constructed as specified by the City Engineer. Streets may be used for conveyance of surface run-off within the following standards:

1. Local streets shall have the capacity to carry a twenty-five (25) year storm-flow without topping the curbs and that the one hundred (100) year storm-flow will be contained within the right-of-way.
2. Collector Streets shall have the capacity to carry a twenty-five (25) year storm-flow without topping the curb and have at least one (1) lane of traffic open at all times. The 100-year storm flow shall be contained within the right-of-way.
3. Arterials shall have the capacity to carry a twenty-five (25) year storm-flow without topping the curb and maintain at least one (1) open lane of traffic in each direction. The 100-year storm flow shall be contained within the right-of-way.
4. The Planning and Zoning Commission shall not recommend for approval any plat of a subdivision which does not make adequate provisions for storm or floodwater runoff channels or basins. Drainage provision shall ensure the health and safety of the public and the property in times of flood.
5. Development shall not increase the peak flow discharge or velocities over natural conditions to adjacent and downstream properties, unless the discharge is into a dedicated drainage easement with channel capacity to contain the increased flow. When calculations indicate that curb capacities are exceeded at a point, no further allowance shall be made for flow beyond that point, and inlets shall be used to intercept flow at that point.
6. The applicant may be required by the Planning and Zoning Commission to carry away by pipe or open ditch any spring or surface water that exists previous to, or as a result of the subdivision. Such drainage facilities shall be located in the road right-of-way where feasible, or in the perpetual unobstructed drainage easements of appropriate width, and shall be

constructed in accordance with the construction standards and specifications of the City of Benbrook.

7. Storm drainage facilities shall be designed in accordance with the iSWM™ Criteria Manual for Site Development and Construction (2010), including the Local Provisions adopted by the City of Benbrook, unless otherwise specified herein. Approval of storm drain facilities necessary and construction requirements shall be the responsibility of the City Engineer. Where there is a question as to the justification of size of the facility required, the question will be resolved in favor of additional drainage capacity.
8. Coordination with the Comprehensive Plan drainage element (when applicable) is required. The developer shall provide those drainage improvements which traverse or abut the proposed subdivision, where specified in the Comprehensive Plan. All costs for such improvements shall be paid by the developer, except where the City Engineer shall determine that the improvements benefit other citizens more than that of the proposed subdivision and shall determine the equitable City participation in such improvements. Such City participation, or any appeal of such requirements, shall be approved by the City Council.
9. Drainage facilities shall be provided and constructed by the developer in accordance with the iSWM™ Criteria Manual for Site Development and Construction (2010) , including the Local Provisions, the Standard Specifications for Public Works Construction and the following basic requirements:
 - a) All drainage improvements shall be designed to an acceptable outfall as approved by the City Engineer.
 - b) The developer may install an approved open channel in lieu of installing pipe larger than 60 inches. This open channel shall be at the rear of residential lots and shall be adequately armored with a material approved by the City (e.g. concrete, rock gabions, etc.). In the event it is necessary to locate the drainage facility adjacent to and parallel to a street it shall be a closed conduit even though pipe sizes larger than 60 inches are required.
 - c) A permanent chain link fence or other fence meeting the requirements of the City shall be constructed along the top of any channel exceeding three feet (3') in depth to enclose the area where it is adjacent to residential lots and also in other cases, where it is deemed necessary to restrict access to the channel.
 - d) All drainage facilities shall be constructed on public right-of-way or easements dedicated for the purpose. Drainage easements shall be of a sufficient size to permit access for maintenance of the drainage facility. The easement shall be designed to facilitate maintenance access to the drainage channel by City crews and equipment. Additional easements shall be required at any access points and the access points shall be designed to restrict access by unauthorized personnel. An access point will typically be required at every intersection of the drainage easement with street right-of-way.
 - e) When a drainage ditch or storm drain pipe, culvert or bridge is proposed, calculations shall be submitted showing basis for design.
 - f) When a drainage channel, storm drain pipe, culvert or bridge is proposed, completed plans, profiles and specifications shall be submitted, showing complete construction details and detailed cost estimate.

- g) Detention/Retention ponds: Retention (maintains a permanent pool elevation) and detention (no permanent pool storage) shall be designed in accordance with the iSWM™ Criteria Manual for Site Development and Construction (2010), including the Local Provisions. Retention/detention ponds shall be encompassed by an easement. The facility will remain the maintenance responsibility of the owner/developer or property owners association, unless otherwise accepted by the City. Acceptance by the City will be contingent upon the facility being a part of a dedicated park or other such property which meets with the City's approval. Preservation of major floodplains is strongly encouraged and detention/retention may be required if a proposed drainage improvement is found to create actual or potential upstream, adjacent or downstream property damage due to the creation of excessive flood velocities or heights. Refer to 16.28.035.C. for additional criteria.
- h) The owner or developer of property to be developed shall be responsible for all storm drainage flowing on his property. This responsibility includes the drainage directed to that property by ultimate development as well as drainage naturally flowing through the property by reason of topography.
- i) The subdivider shall pay for the cost of all drainage improvements required for the development of the subdivision, including any necessary off-site channels or storm sewers and acquisition of the required easements.
- j) Where it is anticipated that additional runoff incidental to the development of the subdivision will overload an existing downstream drainage facility, whether natural or manmade, the Planning and Zoning Commission may withhold approval of the subdivision until appropriate provision has been made to accommodate the problem, and plans shall be provided which include all necessary off-site improvements including storm sewer systems, channel grading, driveway adjustments, culvert improvements, etc.
- k) In areas where downstream pipes or channels are inadequate to handle proposed increased flows, the City, as one alternative, may consider accepting cash payment in lieu of actual drainage improvements. The developer must show that the proposed pipe system to handle the flow from his development would not function properly without substantial downstream improvements. Prior to permitting any development that will significantly increase flood heights downstream or upstream, a hearing before the Planning and Zoning Commission is required with special notice to the adjacent property owners.

10. Off-Site Drainage

- a) Adequate consideration shall be given by the owner in the development of property to determine how the discharge leaving the proposed development will affect adjacent property.
- b) On lots or tracts of three (3) acres or more where storm water runoff has been collected or concentrated, it shall not be permitted to drain onto adjacent property except in existing creeks, channels or storm sewers unless proper drainage easements or notarized letters of permission from the affected property owners are provided. Such letters of permission shall be recorded in the property records of Tarrant County.

C. Detention:

Runoff from sites larger than one (1) acre must not exceed pre-development levels for the one-year, 25-year and 100-year 24-hour events. Multi-phase developments will be considered as a single entity in determining the requirement for detention.

No increase or concentration of storm water may be conveyed off-site without easements and/or downstream drainage improvements. Increased storm water runoff attributable to new development must not exceed the capacity of the downstream drainage system. If no downstream drainage system exists, increased storm water runoff must not adversely affect adjoining property. In cases where the proposed runoff would exceed the capacity of downstream facilities, the developer will be required to provide detention to prevent overloading of downstream systems.

In all new developments where storm water runoff has been collected or concentrated, discharge shall be conveyed off-site by creeks, channels or storm sewer systems. Easements shall be provided by the developer to the City for off-site drainage facilities, as well as for on-site facilities. All flows shall be discharged in a non-erosive manner, and shall meet the established regulations governing storm water quality.

The developer shall pay for the cost of all drainage improvements required, including any necessary off-site channels or storm sewers and acquisition of the required easements.

If it is anticipated that additional runoff caused by the development will overload any existing downstream drainage facility, whether natural or improved, and result in hazardous conditions, approval of the improvements for the proposed subdivision may be withheld until appropriate provision has been made to accommodate the problem. If existing capacity is not available downstream and property damage could occur, the owner or developer shall provide a drainage system or detention facility to mitigate the deficiency. In any case, a letter of acknowledgement shall be obtained from the downstream property owner indicating that the downstream property owner is aware of proposed drainage improvements impacting drainage on or to said owner's property.

Permanent impoundments of water shall be constructed in such a way that negative effects on aesthetics, function, flooding, health, and safety are minimized. Such improvements shall be allowed at the discretion of the City Engineer. The Developer shall be responsible for all necessary permitting required by the Texas Commission on Environmental Quality for impounding public water. The City Engineer may require calculations and/or other documentation that no negative impact is created.

All storage facilities serving drainage areas greater than fifty (50) acres shall be designed and analyzed using reservoir routing of an inflow unit hydrograph. The software program or computational method must be approved by the City Engineer. The analysis should consist of comparing the design flows at a point or points downstream of the proposed storage site with and without storage. Design calculations shall show the effects of the detention facility in each of the 1-, 25-, and 100-year storm events. This may require the use of multi-stage control structures. The detention facility shall be designed to provide the required detention for all of the above-listed frequencies.

Detention storage facilities serving drainage areas smaller than fifty (50) acres may use the Modified Rational Method or Unit Hydrograph method for storage calculations. All calculations must be provided to the City Engineer for review and approval.

Detention facility embankments shall be designed to provide a minimum freeboard of one (1) foot above the 100-year storm water elevation. Certain impoundments are subject to State of Texas regulations.

Outlet structures shall be designed to intercept sediment and floatables from the 25-year storm. The potential for the impact of sedimentation on the detention facility should be evaluated. A means of access

for maintenance of the facility shall be provided.

The outlet control structures for storage facilities typically include a principal outlet and an emergency overflow. The principal outlet functions to restrict the outflow and cause the runoff to use the available storage volume. The principal outlet shall be designed to accommodate the multiple frequency storms listed above while maintaining the minimum freeboard of one (1) foot. The emergency overflow shall be paved and provide positive overflow.

The outlet control structure may be drop inlets, pipes, culverts, weirs, or orifices. Checks should be made to determine if the outlet structure is controlled by weir or orifice flow. The tailwater on the structure could significantly affect its capacity. The engineer should carefully evaluate the tailwater depth. For detention facilities in a series, the lower facility should not cause inundation of the upper outlet control structure. The calculation of the hydraulic capacity for outlet control structures is based on the type of structure used, using standard hydraulic calculations.

All Texas Commission on Environmental Quality (TCEQ) requirements for impoundments and dam safety shall apply. These requirements relate to both the size and the hazard classification of the embankment. Copies of all materials submitted to TCEQ for permitting, along with the TCEQ permits, must be submitted to the City Engineer.

16.28.040 WATER AND SANITARY SEWER

A. Water Installations

1. **Water Supply and Distribution:** All subdivisions shall be provided with water supply and distribution systems approved by the Benbrook Water Authority. All public water systems shall be connected to the existing Benbrook Water Authority distribution system.
2. **Fire Hydrants:** Standard fire hydrants shall be installed as part of the water distribution system in accordance with specifications of the State Board of Insurance and the Benbrook Water Authority Manager. Fire hydrants shall be spaced no further than six hundred feet (600') apart along the street in a Single Family Residential subdivision and no more than three hundred feet (300') along streets in Multiple Family, Commercial or Industrial subdivisions. The spacing and location of fire hydrants is subject to approval of the City Fire Marshal.

B. Sewers

1. All subdivisions shall be provided with an approved sewage disposal system.
2. Connection with the sanitary sewer system shall be required except where both the Benbrook Water Authority and the City Manager determine that such connection will require unreasonable expenditure when compared with other methods of sewage disposal and that alternate methods will protect public health and water quality. Where septic systems are installed, the subdivider shall conduct percolation tests under the supervision of the Tarrant County Health Department to determine the adequacy of proposed lot sizes.

C. Utility Lines under Pavement – All water, sewer, and natural gas utility lines and conduit for electrical, telephone, and cable television that pass under a street or alley shall be installed before the street or alley is paved. When it is necessary that utility lines pass under the street or alley pavement, they shall be installed to a point at least three feet (3') beyond the edge of the pavement.

D. Easements – All easements which will be used for water and/or sewer facilities, or which may potentially be used in the future for water and/or sewer facilities shall be a minimum of fifteen feet (15')

in width. Easements may be greater or lesser than fifteen feet (15') in width as required by the Manager of the Benbrook Water Authority.

16.28.045 STREET LIGHTS, OTHER UTILITIES AND SCREENING DEVICES

A. Street Lights

Street Lights shall be installed by the designated transmission and distribution utility, at the developer's expense, in accordance with the following standards:

1. Local Residential Streets

- a) A light shall be installed at each intersection and shall be installed mid-block at a spacing of not more than two hundred feet (200').
- b) Lights shall be installed at the end of a cul-de-sac and at midpoints if the length of the block exceeds two hundred feet (200').
- c) As a minimum, lamps of not less than nine thousand five hundred (9,500 lumens (100-watt high pressure sodium or equivalent) shall be installed on galvanized steel poles at a height of not less than twenty-five feet (25'). Power shall be provided by underground service or by overhead lines perpendicular to the street.

2. Collector Streets and Local Non-Residential Streets

- a) A light shall be installed at each intersection and shall not be installed midblock at a spacing of not more than one hundred eighty feet (180').
- b) As a minimum, lamps of not less than twenty seven thousand (27,000) lumens (250-watt high pressure sodium or equivalent) shall be installed on galvanized steel poles at a height of not less than twenty-five feet (25'). Collector streets adjoining residential areas may provide lamps of not less than nine thousand five hundred (9,500) lumens (100-watt high pressure sodium or equivalent) upon approval of the Director of Community Development. Power shall be provided by underground service or by overhead lines perpendicular to the street.

3. Arterials

- a) A light shall be installed at each intersection and shall be installed midblock at a spacing of not more than one hundred sixty feet (160').
- b) As a minimum, lamps of not less than fifty thousand (50,000) lumens (400-watt high pressure sodium or equivalent) shall be installed on galvanized steel poles at a height of not less than thirty-five feet (35'). Power shall be provided by underground service or by overhead lines perpendicular to the street.

4. Private Streets

- a) Street lighting shall be installed at the same intensity and spacing as would be required for a public street of similar use.
- b) The responsibility for payment of maintenance and operation of a private street light system shall be the responsibility of the appropriate property owners association.

B. UTILITY CONSTRUCTION GENERALLY

1. Unless otherwise approved by the City Engineer, utilities shall be located in the standardized locations as provided in the City of Benbrook Design Standards and Criteria. All pressurized utility systems (water, gas, etc) shall be located behind the curb line wherever possible.
2. Utility Lines under Pavement: All water, sewer, and natural gas utility lines and conduit for electrical, telephone, and cable television that pass under a street or alley shall be installed before the street or alley is paved. When it is necessary that utility lines pass under the street or alley pavement, they shall be installed to a point at least three feet (3') beyond the edge of the pavement.

C. Underground Electrical, Telephone, and Cable Television Utilities

All telephone, cable television, and electrical utility lateral and service lines shall be placed underground throughout new subdivisions for which Final Plats are approved subsequent to the effective date of this ordinance, subject to the following conditions:

1. All electrical transmission lines, meaning those electrical lines operated at nominal voltages of sixty thousand (60,000) volts or higher, may be placed overhead.
2. Any electric distribution lines, meaning those electrical lines that emanate from substations to distribute power throughout an area, may be placed overhead. Subdivisions located within commercial corridors designated on the Comprehensive Plan of the City shall provide sufficient easement to locate feeders at the rear of lots, away from arterial frontage, wherever possible.
3. Lateral electric lines, meaning those electric lines that emanate from an electric feeder line and are used to distribute power to small areas of electric consumers, and service lines, meaning those electric lines which through a transformer connect a lateral line to a customer's service entrance, may be placed overhead only when they are located along rear property lines to provide service from the rear of the lot. Generally perpendicular overhead street crossings are permitted when connecting rear lateral lines in one block to rear lateral lines in an adjacent block.
4. Any electric distribution or transmission line crossing any Interstate Highway may be placed overhead.
5. Where electrical service is to be placed underground, electrical service for street or site lighting shall also be placed underground except for the lighting standards.
6. Temporary electrical service during construction may be provided by overhead utility lines and facilities prior to activation of the underground service. Following activation of the underground permanent service, the temporary overhead electrical service shall be removed within sixty (60) days.
7. The electrical utility company may plan and construct overhead lines on perimeters of subdivisions or property without obtaining a variance. Telephone and cable television lines may be constructed overhead where overhead electric utility lines are permitted.
8. Each of the utility companies shall be responsible for developing administrative policies and cost reimbursement procedures for the installation and extension of their underground utilities. Nothing herein shall prohibit or restrict any utility company from recovering the difference in cost of overhead facilities and underground utilities from the owner or developer in accordance with the provisions of such utility's approved tariff. No utility company shall be

required to begin construction of underground facilities unless and until the owner or developer of the subdivision has made arrangements satisfactory to the specific utility company for the payment of such underground facilities. If the Planning and Zoning Commission denies a waiver for overhead construction under Paragraph 10 below, the City Council may, by the affirmative vote of at least 3/4 of its members determine that the developer should not pay the difference in cost between overhead and underground construction by overruling the Planning and Zoning Commission and granting a waiver. The City of Benbrook shall not be responsible for any portion of such cost unless specifically authorized by the City Council.

9. All electrical, cable television and telephone support equipment (transformers, amplifiers, switching devices, etc.) necessary for underground installation shall be pad-mounted or placed underground and the difference in cost of such facilities and overhead facilities shall be paid to the installing utility company in accordance with provisions established under paragraph 8 above.
10. In special or unique circumstances, or to avoid undue hardship, the Planning and Zoning Commission may authorize waivers in conjunction with plat approval to the requirements to provide underground facilities.
11. Nothing contained herein shall be construed to require any existing overhead facilities to be placed underground or to prohibit the upgrading, reconstruction or reconducting of any existing overhead facilities with overhead construction.
12. Nothing contained herein shall be construed to alter the intent of any utility Franchise Agreement Ordinance in effect on the effective date of this Ordinance.

D. Screening Devices:

1. Screening walls shall be provided where required by Section 27 of the Zoning Ordinance. Screening walls shall be constructed on private property and shall be maintained by the appropriate property owner.
2. Where screening walls are constructed on the perimeter of a residential subdivision, a homeowners association and common area maintenance reserve fund shall be created in accordance with Chapter 16.28.025, paragraph D.12.h of the Benbrook Municipal Code (1985) as amended.
3. Screening walls shall be a minimum of six feet (6') in height and of solid masonry construction (brick or concrete panels). Concrete panels, such as "brickcrete" must resemble brick or wood construction. No concrete masonry units (concrete blocks) will be permitted. A mow strip (which could be the foundation of the wall) shall be provided. Wooden fences shall not be allowed for exterior screening fences.
4. The foundation and wall shall be designed and sealed by a Professional Structural or Civil Engineer registered in the State of Texas for review and approval by the City. Plans shall include:
 - a) Plan view showing location, dimensions, etc.
 - b) Detail of wall and columns
 - c) Profile or elevation view showing elevations of concrete mow strip and adjacent ground
 - d) Foundation details and calculations, including soils data and wind load.

Walls shall be designed to allow adequate drainage, and shall include a minimum two-inch (2") tall opening along the bottom if necessary. The extent of such an opening shall be

determined by specific site conditions. Walls shall also be designed with adequate sight distances at intersections and corners.”

16.28.050 STREET TREE REQUIREMENTS

All development, with the exception of the SD-Suburban District and RE-Residential Estates single-family subdivisions, shall be required to plant street trees in accordance with the following standards and in accordance to the Site Design Criteria Manual. The Director of Planning may approve alternative street plans due to special site conditions, which may, for reasons such as safety, site conditions, or existing trees on the lot, affect the ability to meet these regulations.

1. Street Tree Plan – All development shall be required to submit a master Street Tree Plan noting location, number, and species of trees to be used within the development.
2. Location – Street trees shall be located between the sidewalk and the right-of-way line, except in cases where there is a designated planting strip in the right-of-way, or the sidewalk is greater than eight (8) feet wide and designed to accept trees in tree wells. Trees will normally be planted eight feet (8') behind the curb.
3. Number and Spacing – Street trees shall be planted by the following requirements:
 - a. Spacing Along Street
 - i. Single-Family Residential – Spacing of street trees within single-family residential developments shall be conducted as follows:
 - b.) One (1) tree per lot, evenly spaced.
 - c.) Corner lots for all single-family developments shall require two or more street trees, evenly spaced, depending on the length of frontage on each street for such lots.
 - ii. Multi-Family Residential, Townhome and Non-residential Developments – Spacing of street trees within multi-family residential, townhome or non-residential developments shall be one (1) tree for every 50 linear feet of street frontage.
 - iii. Corner Lots – Street trees on corner lots for all developments shall be located a minimum of twenty-five (25) feet from the property corner adjacent to the street right-of-way intersection.
 - b. Spacing from Utilities
 - i. Water and Wastewater Service Lines – No trees shall be planted closer than nine (9) feet from any underground water or wastewater utility connection. The location of the water and wastewater utility line shall be considered, for distance purposes, to be the surface of the ground above the line.
 - ii. Fire Hydrants – No trees shall be planted closer than ten (10) feet from any fire hydrant.
 - iii. Street Lighting – Street trees should be installed, and spacing may be adjusted, to avoid street lights that are installed in accordance with Section 16.28.045.A of the Subdivision Ordinance. The City Planner may waive the requirement to plant a tree that conflicts with a street light if it is demonstrated that no reasonable alternative exists.

- iv. Root Barrier System – Spacing requirements from utilities may be reduced at the discretion of the City Engineer with a street tree plan submitted and approved which would include the installation of root barrier systems approved by the City Engineer.

4. Tree Species

- a. Street Tree Species Type – Tree species to be used for street trees shall be one of the following species:

- Bald Cypress (*Taxodium distichum*)
- Bur Oak (*Quercus macrocarpa*)
- Carolina Buckthorn (*Frangula caroliniana*)
- Cedar Elm (*Ulmus crassifolia*)
- Chinquapin Oak (*Quercus muehlenbergii*)
- Desert Willow (*Chilopsis linearis*)
- Eastern Red Cedar (*Juniperus virginiana*)
- Eve's Necklace (*Sophora affinis*)
- Live Oak (*Quercus virginiana*)
- Mexican Buckeye (*Ungnadia speciosa*)
- Post Oak (*Quercus stellata*)
- Redbud (*Cercis Canadensis*)
- Red Oak (*Quercus shumardii*)
- Shumard Oak (*Quercus shumardi*)

Alternate species may be used only upon approval by the City's Public Services Director.

- b. Species Diversity – Street tree species shall be of the same variety along an individual block. The same species of tree shall not be used on streets which are generally parallel and within two (2) blocks apart. If a species of tree is approved to be installed on the dead-end street, the same species of tree should be used on the extension of the street into the new subdivision.

5. Maintenance

- a. Street trees shall be maintained by the adjoining property owner. It is the adjoining property owner's responsibility to thin, prune, spray, water and fertilize, and otherwise maintain street trees, as may be deemed necessary and feasible. All incurred costs are to be borne by the property owner.
- b. Tree Canopy Height – The street tree shall be maintained by pruning, thinning and other necessary care by the adjacent property owner to ensure a minimum clearance of fifteen (15) vertical feet from the curbline to any intruding canopy branches.
- c. Removal of Trees or Plantings in Public Right-of-Way – The City may remove any planting which constitutes a hazard or may endanger the health, well-being or property of the public or which constitutes an obstruction to the vision of traffic.
- d. Tree Replacement – The City may replace an approved street tree or other planting which has died or may have been removed for any reason (including utility work), or plant additional street trees deemed appropriate and consistent with available resources.
- e. Abuse or Mutilation – It shall be unlawful for any person to break, destroy, or mutilate any approved street tree, or to set fire or permit any fire to cause damage to any portion of any

street tree, or to attach or place any rope or wire, sign, poster or other device on any street tree.

**SECTION II
PENALTY CLAUSE**

Any person, firm or corporation who violates, disobeys, omits, neglects or refuses to comply with or who resists the enforcement of any of the provisions of this Ordinance shall be fined not more than Two Thousand Dollars (\$2,000.00) for all violations involving zoning, fire safety or public health and sanitation, including dumping of refuse, and shall be fined not more than Five Hundred Dollars (\$500.00) for all other violations of this Ordinance. Each day that a violation is permitted to exist shall constitute a separate offense.