#### **ORDINANCE NO. 14-444**

AN ORDINANCE OF THE CITY OF BUNKER HILL VILLAGE AMENDING ITS CODE OF ORDINANCES BY AMENDING CHAPTER 4, BUILDING AND CONSTRUCTION BY AMENDING THE TITLE OF CHAPTER 4 TO BE DEVELOPMENT, BUILDING AND CONSTRUCTION, BY DELETING ARTICLE I, IN GENERAL, IN ITS ENTIRETY AND SUBSTITUTING IN ITS PLACE A NEW ARTICLE I, IN GENERAL, BY DELETING FROM ARTICLE III, SUBSTANDARD BUILDINGS AND STRUCTURES, SECTION 4-51 IN ITS ENTIRETY, BY DELETING FROM ARTICLE IV, CONSTRUCTION CODES, SECTION 4-77, NOTIFICATION OF PERMIT APPLICATIONS: PROCESS AND MAKING SAME PART OF ARTICLE I, IN GENERAL, BY DELETING CHAPTER 7, FLOOD DAMAGE PREVENTION, IN ITS ENTIRETY, AND MAKING IT PART OF ARTICLE V, DRAINAGE AND FLOOD DAMAGE PREVENTION, OF CHAPTER 4, BUILDING AND CONSTRUCTION, BY ADDING DRAINAGE REGULATIONS TO ARTICLE V, DRAINAGE AND FLOOD DAMAGE PREVENTION, BY DELETING ARTICLE VII, PRESERVATION OF TREES, OF CHAPTER 10, OFFENSES AND MISCELLANEOUS PROVISIONS, IN ITS ENTIRETY AND ADDING A NEW ARTICLE VI, TREE PRESERVATION, TO CHAPTER 4, BUILDING AND CONSTRUCTION, BY DELETING ARTICLE II, OUTDOOR LIGHTING, OF CHAPTER 10, OFFENSES AND MISCELLANEOUS PROVISIONS, IN ITS ENTIRETY AND ADDING A NEW ARTICLE VII, OUTDOOR LIGHTING, TO **CHAPTER BUILDING** 4, AND CONSTRUCTION: REPEALING ALL ORDINANCES OR PARTS OF **ORDINANCES** INCONSISTENT OR INCONFLICT **WITH** THIS ORDINANCE; PROVIDING A PENALTY IN AN AMOUNT NOT TO EXCEED \$2,000.00 FOR ANY VIOLATION OF THESE PROVISIONS, WITH EACH DAY CONSTITUTING A NEW VIOLATION; AND PROVIDING FOR SEVERABILITY.

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WHEREAS, the City of Bunker Hill Village, Texas (the "City") is a residential community founded with a purpose of maintaining the atmosphere of a small, country, wooded community of families while preserving owners' rights to utilize and enjoy their property; and

WHEREAS, the City continues to seek to maintain the character of the community upon which it was founded; and

WHEREAS, the City has conducted a review of all regulations relating to development, building and construction; and

WHEREAS, the City desires to place all such regulations into one chapter for the ease of property owners and developers; and

WHEREAS, the City desires to protect the public health, safety and welfare our residents and property owners by ensuring that stormwater drainage is contained and/or drains properly/freely so as not to cause damage to persons and properties; and

WHEREAS, over the last ten (10) years, the City has invested over \$20,000,000 in drainage infrastructure with the desire to address drainage concerns and maintain the capacity achieved as a result of this investment; and

WHEREAS, as development and redevelopment occurs, the increase in stormwater runoff will exceed the added capacity achieved with our current systems; and

WHEREAS, this ordinance is recommended to implement a stormwater drainage management program for the benefit of all within the City;

WHEREAS, the purpose of this Ordinance is to promote site planning which furthers the preservation of mature trees and natural areas; to protect trees during construction; to facilitate site design and construction which contribute to the long term viability of existing trees; and to control the removal of trees when necessary; and

WHEREAS, the City Council finds that the preservation of pine and hardwood trees within the City is necessary to maintain such rural community character; and

WHEREAS, increasing population density within the surrounding urbanized area and the proliferation of roadways and attendant traffic has increased the levels of noise, airborne pollution and heat; and

WHEREAS, trees act as a buffer to reduce noise pollution, provide shade, cool the air, and otherwise temper the effects of summer heat, restore oxygen to the atmosphere, reduce glare and break the monotony of urbanized development, and provide an ecological habitat for songbirds and other animals and plant species; and

WHEREAS, the urban forest of the City should be preserved and enhanced to the fullest extent possible for the protection and benefit of future generations, and to maintain and enhance property values of the properties located within the City; and

WHEREAS, the City Council hereby finds and determines that unnecessary damage and destruction of trees within the City adversely affects public health, safety, and general welfare; now therefore; and

WHEREAS, with the approval of said ordinance it shall become effective January 1, 2015;

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF BUNKER HILL VILLAGE, TEXAS;

- **Section 1.** The facts and matters contained in the preamble are hereby found to be true and correct and are adopted as if set forth herein.
- Section 2. The Code of Ordinances of the City of Bunker Hill Village, Texas is hereby amended by adding the word "Development" to the title of Chapter 4 thereof, with the new title reading "Chapter 4 Development, Building and Construction.
- Section 3. The Code of Ordinances of the City of Bunker Hill Village, Texas is further amended by deleting Article I, In General, of Chapter 4, Building and Construction, in its entirety and substituting a new Article I, In General, to read as follows: (Note: Section 4-1 was in the original Article I with no changes to the text; Sections 4-5 and 4-10 were existing in other locations in the Code and are being moved to Article I of Chapter 4 with no changes to the text).

#### "ARTICLE I. IN GENERAL

## Sec. 4-1. Proof of insurance required.

(a) All contractors requiring permits under chapter 4 shall file with the city, and maintain for the entire period during which work pursuant to such permit is being performed, commercial general liability insurance in an amount of not less than five hundred thousand dollars (\$500,000.00).

- (b) If an insurance policy required hereunder expires or is revoked before work for which the permit was issued is complete, the building official shall cancel that permit and issue a stop work order.
- (c) All such policies of insurance shall be written by a company authorized to do business under the rules of the state board of insurance. Compliance with the above requirement shall be evidenced by the filing of a certificate of insurance with the city secretary. Each certificate shall include an endorsement thereon that the city shall be notified at least ten (10) days prior to the cancellation or expiration of any such certificate.

## Sec. 4-2. Applications and Filing.

- (a) Any person requesting that the City take any action relating to the development of land and construction of improvements that requires City approval, must, whenever required by a provision of this Code, submit a complete application along with the applicable fee to the City on forms provided by the City for that purpose.
- (b) Any application required to be submitted under this Development Code will not be deemed filed for purposes of processing or considering the application until the Building Official certifies on the application submitted that all information required by the application and these regulations have been properly submitted and all fees paid. The Building Official may waive the requirement to submit information otherwise required if the Building Official determines the information is not material or relevant to the decision to be made on the application.
- (c) An application must be submitted by the owner of the premises or person having the legal authority to act for the owner of the premises to which the application relates. The Building Official may require an applicant to submit evidence of ownership or the authority to act for the owner of the premises.
- (d) The Building Official may promulgate in writing reasonable regulations and deadlines relating to the submission of applications for consideration by the person, board, or commission charged with making a recommendation or decision on the application.

#### Sec. 4-3. Definitions.

The following definitions shall apply in the interpretation and enforcement of this ordinance. Words and terms not defined herein shall be construed in accordance with the ordinances of the city or their customary usage and meaning. When necessary for a reasonable construction of this ordinance, words in the singular shall include the plural, words in the plural shall include the singular, and words used or defined in one (1) tense or form shall include other tenses or derivative forms. The word "building" shall include the meaning of the word

"structure." The words "shall,"."will," and "must" are mandatory, and the word "may" is directory.

- (a) Building shall mean any structure designed or built for support, enclosure, shelter or protection of persons, animals or property of any kind.
- (b) Building area the maximum portion of a lot, defined by building setbacks, over which buildings and structures may be constructed.
- (c) District A shall mean one of the City's two (2) residential zoning districts and consists mainly of large and medium lots with single-family dwellings and open spaces designed and desirable for large lot single-family dwellings as defined in Appendix A of this Code of Ordinances.
- (d) District B shall mean one of the City's two (2) residential zoning districts and consists mainly of small, medium and large lots, with single-family dwellings as defined in Appendix A of this Code of Ordinances.
- (e) Expansion/Addition shall mean any construction which expands or enlarges the footprint greater than 200 sf (impermeable slab) of the existing surface area by a change/addition such as an room, pool, garage, driveway, patio, outdoor kitchen, etc. Should an expansion/addition be combined with a remodel/maintenance improvements or a reconstruction project, the stricter requirements will be enforced.
- (f) Footprint shall mean the surface area on a lot used by the building structure, defined by the perimeter of the building plan in addition to garages, pools, patios and driveways.
- (g) In Kind/Same Kind shall mean a reconstruction of accessory or driveway structures whereby the new project consists of the same land use, location, and size or less as previously in place, such as the reconstruction of a garage or swimming pool.
- (h) Lot shall mean a parcel of land as defined in Section 2.01 of Appendix A of this Code.
- (i) New Construction shall mean the construction of a new home or main structure, beginning with a vacant lot; the vacant lot can be a result of removing or tearing down existing structure(s).
- (j) Reconstruction shall mean the reconstruction of 50% or more, either value or living area, (of which a building permit is required) of an existing structure within the existing footprint. This includes structural (wall board or ceiling board is removed), and/or if plumbing or electrical utilities are impacted. The reconstruction shall be cumulative of all remodeling or modification work to the structure within any consecutive twenty-four (24) month period. For purposes of this subsection, the value of the structure shall be the average cost per square foot of all new

- construction within the city for the last three (3) years based on certified values from the Harris County Appraisal District, as set forth in the City of Bunker Hill Village Fee Schedule as adopted by city council.
- (k) Remodel/Maintenance Improvements shall mean (i) the repair, upkeep, reconstruction or remodeling of a house/structure, building, or slab which does not change, influence or impact the structural integrity or existing utilities for the building or (ii) the alteration of less than 50% (of which a building permit is required) of an existing house/structure, building, or slab within the existing building footprint with no net impact to lot coverage or impervious cover calculations.
- (1) Structure shall mean anything constructed or erected which requires location on the ground or is attached to something having a location on the ground including, but not limited to, signs, fences, walls, poles and buildings, whether of a temporary or permanent nature.

These definitions shall define the requirements for various provisions including but not limited to the following:

Event	Zoning	Building	Drainage	<u>Trees</u>
New Construction	Yes	Yes	Yes	Yes
Reconstruction	Yes	Yes	Yes	Yes
Expansion/Addition 200 sf;	Yes	No to Existing, Yes to new, No to Sprinklers	Yes	Yes * See provision for tenured ownership of home
< 200 sf	Yes	Yes	No	No
Re-Model/ Maintenance	No	No	No	No
Non - Main Structure - In Kind/Same Kind		and a permit is require Kind" considered		nce project

# Section 4-4. Mandatory Pre-Development Meeting.

A mandatory pre-development meeting is required for all new construction, reconstruction, and/or expansion/addition projects. The pre-development meeting is intended to expedite the review process and ease the construction process. Property owners and their builders, contractors and/or consultants shall attend this meeting. The meeting will provide an opportunity for discussion regarding the development process and requirements in the City of Bunker Hill Village including zoning, setbacks, coverage calculations, trees, drainage, and other ordinances that impact the planning and development of the property. A signature of acceptance of the pre-development packet and the meeting attendance will be required of the owner. No approvals will be provided at this meeting.

#### Section 4-5. Hours of Construction.

Hours for construction, which include but are not limited to the erection, including excavation, demolition, alteration or repair work on any building or other structure, repairs for site work, and/or landscaping, maintenance, or repairs, are allowed between the hours of 7:00 a.m. and 6:00 p.m. on weekdays that are not Recognized Holidays, and between the hours of 8:00 a.m. and 5:00 p.m. on Saturdays that are not Recognized Holidays, except in cases of extreme and urgent necessity in the interest of public safety with the approval of the Building Official. No construction shall be done on Sundays.

Recognized Holidays shall include New Year's Day, Memorial Day, July 4th, Labor Day, Thanksgiving Day, Christmas Eve and Christmas Day.

The provisions of this subsection shall not apply to work being performed directly by the owner of the property on which the work is being performed.

## Section 4-6. Construction Fencing.

Each permittee for any pre-development activity or major development must provide and maintain construction fencing in accordance with this section during all times when the permit is in effect and for so long thereafter as the site is affected by construction activity. The construction fencing must fully enclose the entire site to screen construction activity from public view. It may enclose the sidewalk area, but only to the extent reasonably necessary to reduce the risk of hazards to sidewalk users. The construction fencing must be at least 5.5 feet high and must be the color green. No separate fence permit is required for such a temporary fence erected in connection with pre-development activity or a major development for which a main building permit is in effect.

## Section 4-7. Underground Utilities.

All utility service lines for electricity, telephone, gas, cable television and any other such service for individual lots shall be underground unless federal or state law or regulations require otherwise.

#### Section 4-8. Street Lights.

Street lighting. Street lighting is allowed for new development and shall conform to the latest edition of the Illuminating Engineering Society Handbook. Street light fixtures must conform to a standard as provided by the City's electrical provider. Decorative fixtures are allowed if provided by the City's electrical provider.

#### Section 4-9. Surveys; Site Plans.

- (a) Basic survey. For each development project for which a permit is required, the applicant must submit a boundary survey showing all existing and proposed structures. The building official may waive this requirement if substantially equivalent information is available from other sources.
- (b) Forms survey. For each major development project and each new foundation of a building, the applicant must submit an additional survey showing the actual location of all foundation forms or guides as set upon the ground. The survey must show them with respect to the boundaries of the building site. It shall be unlawful to proceed with such pouring or affixing before the building official makes a note on such survey to the effect that the proposed foundation appears to comply with applicable regulations, e.g., yard and site regulations.
- (c) Drainage, elevation (surveys and drawings). The applicant must provide additional surveys or drawings and/or analysis for drainage as are required by ARTICLE V. FLOOD DAMAGE PREVENTION of this Chapter.
- (d) Standards. All surveys, drawings and site plans (including their form, scope, media and certifications) must meet standards prescribed by the Building Official. Submission of site plans must be 11 x 17 size or sent/filed electronically.
- (e) Site plans.
  - (1) Intent. The intent of this subsection is to aid persons who must comply with applicable regulations not only during construction but also thereafter by assembling, coordinating, and recording important surveys, drawings and compliance data.

- (2) A site plan is required for projects involving new construction, reconstruction, and/or expansion/addition projects.
- (3) Content. Each site plan must clearly depict the following, as applicable:
  - (a) Basic survey;
  - (b) Forms survey (after it becomes available);
  - (c) Drainage and topographic survey;
  - (d) Standard base elevation survey;
  - (e) Easements and plat restrictions;
  - (f) Buildings and other major structures;
  - (g) Open areas, impervious areas, landscaping and areas for required trees and pervious areas;
  - (h) Yards or "setbacks"; buildable area;
  - (i) Fences;
  - (j) Mechanical equipment;
  - (k) Garage openings, pavement, parking areas, driveways, emergency access ways, fire zones, sidewalks, loading areas, curb cuts, waste storage areas and special screens;
  - (l) Drainage facilities in accordance with ARTICLE V. FLOOD DAMAGE PREVENTION of this Chapter; or
  - (m) Other features and facilities required to comply with applicable regulations.
- (4) Preparation and processing ("as designed" site plans).
  - (a) A preliminary version of the site plan (showing "as designed" conditions) must be filed with the building official before issuance of the initial permit for the project.
  - (b) The building official shall approve the "as designed" plan, unless the building official notices some noncompliance with this section or other applicable regulations.
  - (c) No permit may be issued until the "as designed" site plan is approved.
- (f) Compliance required. It shall be unlawful for any person to erect, construct, alter, use, own, possess or control any structure or grade-raising project without:
  - (1) Providing the surveys and site plans required by this section; and
  - (2) Otherwise complying with this section.

## Section 4-10. Notification of permit applications; process.

(a) *Definitions*. For the purposes of this section, the following words or terms shall have the meanings ascribed thereto, unless the context clearly indicates otherwise:

Recorded restriction shall mean a restriction that is contained or incorporated by reference in any properly recorded plan, plat, replat or other instrument affecting a subdivision.

Restriction shall mean a limitation that:

- (1) Affects the use to which real property may be put;
- (2) Fixes the distance that a building must be set back from property lines, street lines, or lot lines; or
- (3) Affects the size of a lot or the size, type or number of buildings that may be built on a lot.
- (b) Affidavit required. No building permit shall be issued for the construction of a new building, or for any addition to an existing building that would extend such building beyond the footprint of the building prior to the proposed addition, on a lot subject to a recorded restriction, unless the permit applicant has submitted an affidavit certifying that notice of the permit application has been delivered to the owner, as shown on the current tax roll, of each lot within the subdivision that is subject to the recorded restriction. Provided however, if the instrument(s) establishing the recorded restriction provides for creation of a committee or association with authority to enforce the recorded restriction, and there is a committee or association duly organized and operational in accordance with such instrument, certification that notice has been served on an authorized agent or officer of the committee or association may be given in lieu of notice to all individual property owners within the subdivision other than owners of property adjacent to the lot subject to the permit. If the permit application is for construction on a lot that is not subject to a recorded restriction, the applicant shall certify such fact by affidavit. The city administrator is authorized to promulgate affidavit forms for use in the implementation of this section.
- (c) Form of notice; method of delivery. Any notice required in paragraph (b) above shall include a general description of the proposed construction, the name of the subdivision, and the lot and block number and street address of the lot subject to the permit. Such notice, as outlined below, shall be delivered by depositing the same, properly addressed and postage prepaid, in the United States mail, registered or certified, return receipt requested.

(d) Waiting period; stop work orders. The building official shall not issue a building permit for construction on a lot subject to a recorded restriction until the expiration of five (5) business days following the receipt of an executed affidavit that fully complies with paragraph (b) above.

## Section 4-11. Work site conditions; clean-up.

- (a) Permittee's duties. Each permittee shall perform all the following duties while the permit is in effect and for so long thereafter as the work area is affected by construction activity:
  - (1) Immediately pickup and properly dispose of all material scraps, trash, rubble and debris that may be present at the work site or which may have been blown or transported from the site to nearby public or private property (if access is allowed to such private property for pickup activity);
  - (2) Maintain on the work site a "dumpster", a penned enclosure or other receptacle sufficient to contain all scraps, trash and debris generated by the construction activity;
  - (3) Immediately stack, restack or otherwise secure all building materials, equipment and tools that may be present on or near the work site and not in actual use;
  - (4) Immediately cover all excavations and holes, mark and barricade any hazards and secure pouring of concrete or similar activities authorized by the permit; all windows, doors and other openings; and
  - (5) Immediately remove all mud, clay and debris that may have been deposited on any roadway or sidewalk in connection with, or as a result of, the work.
- (b) Defense. It is an affirmative defense to prosecution under this section that any failure to comply continues no longer than is reasonably necessary for the performance of the work.

# Section 4-12. Construction Related Parking.

For any address for which an active building or maintenance permit has been issued, all vehicles shall be required to be parked on the lot for which the permit has been issued. For private streets, parking may not be in the access easement.

Vehicles parked temporarily for a period of 30 minutes or less are not required to meet this requirement. Blocking of a street so that less than 15 feet of width for access is not allowed under any circumstance.

# Sections 4-13-4-20 Reserved."

Section 4. The Code of Ordinances of the City of Bunker Hill Village, Texas is further amended by deleting from Article III, Substandard Buildings or Structures, of Chapter 4, Building and Construction, Section 4-51, Definitions, in its entirety. (Note: these definitions were moved up to Article I).

Section 5. The Code of Ordinances of the City of Bunker Hill Village, Texas is further amended by deleting from Article IV, Construction Codes, of Chapter 4, Building and Construction, Section 4-77, Notification of Permit Applications; Process, in its entirety. (Note: this section was moved up to Article I).

Section 6. The Code of Ordinances of the City of Bunker Hill Village, Texas is further amended by deleting Chapter 7, Flood Damage Prevention, in its entirety and adding a new Article V, Drainage and Flood Damage Prevention, to Chapter 4, Building and Construction, with the new Article V to read as follows: (Note: the provisions from Chapter 7, Flood Damage Prevention are being moved to this location in Chapter 4 with no changes to text other than internal section references. The new drainage regulations, however, are being added here as Section 4-82 and select definitions in Section 4-81).

"Article V. Drainage and Flood Damage Prevention.

Division 1. In General

Section 4-81. Definitions.

Unless specifically defined below, words or phrases used in this chapter shall be interpreted to give them the meaning they have in common usage and to give this chapter its most reasonable application. Appeal shall mean a request for a review of the building official's interpretation of any provision of this chapter or a request for a variance.

Area of shallow flooding shall mean a designated AO, AH, or VO zone on the flood insurance rate map (FIRM) with a one (1) percent chance or greater annual chance of flooding to an average depth of one (1) to three (3) feet where a clearly defined channel does not exist, where the path of flooding is unpredictable, and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow.

Area of special flood hazard shall mean the land in the floodplain subject to a one (1) percent or greater chance of flooding in any given year. The area may be designated as Zone A on the flood hazard boundary map (FHBM). After detailed ratemaking has been completed in preparation for publication of the FIRM, Zone A may be refined into Zones A, AE, AH, AO, A1-99, VO, V1-30, VE or V.

Base flood shall mean the flood having a one (1) percent chance of being equalled or exceeded in any given year.

Critical feature shall mean an integral and readily identifiable part of a flood protection system, without which the flood protection provided by the entire system would be compromised.

Detention shall mean the temporary storage of stormwater. A detention feature temporarily detains stormwater with an outlet that restricts the outflow.

Development shall mean any mammade change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations.

Elevated building shall mean a nonbasement building built, in the case of a building in Zones A1-30, AE, A, A99, AO, AH, B, C, X, and D, to have the top of the elevated floor, or in the case of a building in Zone V1-30, VE, or V, to have the bottom of the lowest horizontal structure member of the elevated floor elevated above the ground level by means of pilings, columns (posts and piers), or shear walls parallel to the floor of the water, and adequately anchored so as not to impair the structural integrity of the building during a flood of up to the magnitude of the base flood. In the case of Zones A1-30, AE, A, A99, AO, AH, B, C, X, and D, "elevated building" also includes a building elevated by means of fill or solid foundation perimeter walls with openings sufficient to facilitate the unimpeded movement of floodwaters. In the case of Zone V1-30, VE, or V, "elevated building" also includes a building otherwise meeting the definition of "elevated building," even though the lower area is enclosed by means of breakaway walls if the breakaway walls meet the standards of section 60.3(e)(5) of the National Flood Insurance Program regulations.

Existing construction shall mean, for the purposes of determining rates, structures for which the "start of construction" commenced before the effective date of the FIRM or before January 1, 1975, for FIRMs effective before that date. "Existing construction" may also be referred to as "existing structures."

Existing conditions shall mean the state of the property prior to any construction or reconstruction begins.

Flood or flooding shall mean a general and temporary condition of partial or complete inundation of normally dry land areas from:

- (1) The overflow of inland or tidal waters; and/or
- (2) The unusual and rapid accumulation or runoff of surface waters from any source.

Flood insurance rate map (FIRM) shall mean the official map on which the federal emergency management agency has delineated both the areas of special flood hazards and the risk premium zones applicable to the city.

Flood insurance study shall mean the official report provided by the federal emergency management agency. The report contains flood profiles, water surface elevation of the base flood, as well as the flood boundary-floodway map.

Floodplain or flood-prone area shall mean any land area susceptible to being inundated by water from any source (see definition of flooding).

Flood protection system shall mean those physical structural works for which funds have been authorized, appropriated and expended and which have been constructed specifically to modify flooding in order to reduce the extent of the areas within a community subject to a "special flood hazard" and the extent of the depths of associated flooding. Such a system typically includes hurricane tidal barriers, dams, reservoirs, levees or dikes. The specialized flood modifying works are those constructed in conformance with sound engineering standards.

Floodway (regulatory floodway) shall mean the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height.

Functionally dependent use shall mean a use which cannot perform its intended purpose unless it is located or carried out in close proximity to water. The term includes only docking facilities, port facilities that are necessary for the loading and unloading of cargo or passengers, and shipbuilding and ship repair

facilities, but does not include long-term storage or related manufacturing facilities.

Habitable floor shall mean any floor usable for the living purposes which includes working, sleeping, eating, cooking or recreation, or a combination thereof. A floor used for storage purposes only is not a "habitable floor".

Highest adjacent grade shall mean the highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.

Levee shall mean a manmade structure, usually an earthen embankment, designed and constructed in accordance with sound engineering practices to contain, control, or divert the flow of water so as to provide protection from temporary flooding.

Levee system shall mean a flood protection system which consists of a levee, or levees, and associated structures, such as closure and drainage devices, which are constructed and operated in accordance with sound engineering practices.

Lowest floor shall mean the lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usable solely for parking or vehicles, building access or storage in an area other than a basement area is not considered a building's lowest floor; provided that such enclosure is not built so as to render the structure in violation of the applicable nonelevation design requirement of Section 60.3 of the National Flood Insurance Program regulations.

Manufactured home shall mean a structure transportable in one (1) or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when connected to the required utilities. For floodplain management purposes the term "manufactured home" also includes park trailers, travel trailers, and other similar vehicles placed on a site for greater than one hundred eighty (180) consecutive days. For insurance purposes the term "manufactured home" does not include park trailers, travel trailers, and other similar vehicles.

Mean sea level shall mean, for purposes of the national flood insurance program, the national geodetic vertical datum (NGVD) of 1929 or other datum, to which base flood elevations shown on a community's flood insurance rate map are referenced.

New construction shall mean, for floodplain management purposes, structures for which the "start of construction" commenced on or after December 7, 1987.

Private Street shall mean a roadway owned and maintained by a private individual or individuals, organization, or company rather than by the city or other government entity and provides vehicular access to adjacent private land.

Site Plan shall mean a drawing that shows the plans for developing the land. The document needs to be to scale and will reflect the location and size of each building to be built, or that currently exists, as well as parking, landscaping, and ancillary uses such as pools, patios, or workshop.

Slab Elevation shall mean the bottom floor elevation. For a home with a slab floor, this is the slab elevation. For a raised home, it is the lowest elevation of the crawlspace floor or basement floor or floor elevation surrounded by an enclosure.

Start of construction includes substantial improvement and shall mean the date the building permit was issued, provided the actual start of construction, repair, reconstruction, placement, or other improvement was within one hundred eighty (180) days of the permit date. The "actual start" shall mean either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for basement, footings, piers or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure.

Storm Sewer shall mean a storm drain that is a closed-conduit that receives runoff from inlets and conveys the runoff to some point where it is then discharged into a channel, water body or other system.

Stormwater shall mean water that originates during precipitation events; Stormwater that does not soak into the ground becomes surface runoff, which either flows directly into surface waterways or is channeled into storm sewers, which eventually discharge to surface waters. Stormwater is of concern related to the volume and timing of runoff water (flooding).

Structure shall mean a walled and roofed building, including a gas or liquid storage tank, that is principally above ground, as well as a manufactured home.

Substantial improvement shall mean any repair, reconstruction or improvement of a structure, the cost of which equals or exceeds fifty (50) percent of the market value of the structure either before the improvement or repair is started, or if the structure has been damaged and is being restored, before the

damage occurred. For the purpose of this definition "substantial improvement" is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure. The term does not, however, include either any project for improvement of a structure to comply with existing state or local health, sanitary, or safety code specifications which are solely necessary to assure safe living conditions, or any alteration of a structure listed on the National Register of Historic Places or a state inventory of historic places.

Variance is a grant of relief to a person from the requirements of this chapter when specific enforcement would result in unnecessary hardship. A variance, therefore, permits construction or development in a manner otherwise prohibited by this chapter.

Violation shall mean the failure of a structure or other development to be fully compliant with this chapter. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in Sections 60.3(b)(5), (c)(4), (c)(10), (d)(3), (e)(2), (e)(4) or (e)(5) of the National Flood Insurance Program regulations is presumed to be in violation until such time as that documentation is provided.

Water surface elevation shall mean the height, in relation to the national geodetic vertical datum (NGVD) of 1929 (or other datum, where specified), of floods of various magnitudes and frequencies in the floodplains of coastal or riverine areas.

# Section 4-82. Stormwater Drainage Management Program And The Lands To Which Ordinance Applies.

This ordinance shall apply to all areas within the jurisdiction of Bunker Hill Village, Texas.

#### (1) Purpose and Applicability.

It is the purpose of this article to preserve and enhance the desirability of our City by requiring careful planning of our City's redevelopment. This includes the management of our drainage facilities and stormwater while ensuring the owners' rights to utilize and develop their property.

The City currently consists of two Residential Zoning Districts: District A and District B. In addition, the City includes two elementary schools, several churches, and a private recreation center all of which are permitted within the Residential Districts by way of a Specific Use Permit. This Ordinance will apply to all development both Residential and Non-Residential as defined below.

The City's Stormwater Drainage System consists of enclosed storm

sewers, roadside ditches, swales, inlets, detention facilities, open channels and management of overland (sheet) flow as singular components and/or as part of a combined system. During extreme rainfall events, individual lots/yards provide for overflow and ponding. This Ordinance, the City's Drainage Criteria Manual and the City's Development Code strives to take a pro-active approach to prevent structural flooding as a result of rainfall events.

## (2) Drainage Requirements.

All stormwater drainage calculations shall be in accordance with the City's Drainage Criteria Manual.

#### Residential - Individual Lot

Stormwater runoff conveyed to the City's drainage system shall be restricted to existing conditions; For new construction, reconstruction and expansion, Property Owner(s) is responsible for detaining the difference of stormwater runoff calculated between the existing and proposed improvements. The City will designate the receiving point for the development.

Lots fronting a Private Street

Stormwater runoff conveyed from individual lots on private streets shall be restricted to existing conditions for the existing stormwater conveyed to the City's drainage system at the receiving point in addition to the stormwater draining from the lot. Property owners along the private street may work together to develop a coordinated/collective drainage system maintaining the existing conditions at the City's designated receiving point.

#### Non- Residential

Property Owner(s) is responsible for detaining 100% of stormwater runoff calculated from the proposed reconstruction and/or new development:

- (1) If the proposed improvements are less than 50% of the value or area of the entire property/site, the stormwater calculated shall be based on the impacted area only.
- (2) If the proposed improvements are greater than 50% of the value or area of the entire site, the stormwater calculated shall be based on the entire site including associated ancillary facilities such as parking.

The impact, as a result of redevelopment, shall be evaluated and required as part of the Specific Use Permit Process. Although, 100% of detention will be required, the onsite/private system will continue to be tied to the City's system at existing or designated connect points.

#### Residential and Non-Residential Maintenance Improvements

Maintenance Improvements do not trigger the need for drainage requirements

if there is no change in the surface footprint of the site/lot

and therefore, no negative impact to the City's drainage system.

## Replat or New Subdivision - Residential and Non-Residential

The Property Owner(s) is responsible for detaining 100% of stormwater runoff from existing and new development including any proposed public streets.

Although, 100% of detention will be required, the onsite/private system will continue to be tied to the City's system at existing or designated connect points.

When feasible, a Regional Detention System should be developed to accommodate the new development. With approval, through the City's subdivision process, detention may be included in the public right-of-way.

Lots that are created as a part of a Regional Detention System and meet the drainage calculations and assumptions for the System are exempt from individual lot requirements.

## 3) Pre-Development Meeting.

A Pre-Development Meeting is required for all New Construction, Reconstruction, Expansion/Additions. New Construction, Reconstruction, Expansion/Additions add to the building footprint of the site and will be required to meet this Stormwater Drainage Ordinance. The Pre-Development Meeting provides an opportunity to understand the ordinance prior to submittal of any plans for review and permitting. See Sec 4-4.

# (4) Requirements for Submittal of Information for Proposed Improvements and Calculation of Stormwater Runoff.

Submittal information will be in conformance with the City's Drainage Criteria Manual and include but not be limited to the following:

(a) A site plan identifying existing conditions: the building footprint and other footprints for all impervious and pervious cover; trees identified by location and size; and drainage systems and conditions including existing contours;

- (b) A site plan identifying structures and site conditions to be removed (depending on magnitude of project, this may be shown on the site plan for existing conditions or proposed conditions);
- (c) A site plan identifying all impervious and pervious improvements proposed;
- (d) A proposed tree plan (can be an overlay) showing the number, size and location of trees with the proposed improvements; and
- (e) A drainage plan which includes the City's drainage calculation sheet and site plan showing the proposed drainage system by size and slab elevation to accommodate the drainage calculated in accordance with this ordinance and the criteria manual. The slab elevation of all habitable structures shall be established by the property owner's engineer or architect. The elevation shall be based on the latest FEMA datum and datum adjustments.

All stormwater runoff will be calculated as outlined in the City of Bunker Hill Drainage Criteria Manual.

## Section 4-83. Basis for establishing areas of special flood hazard.

The areas of special flood hazard identified by the federal emergency management agency in a scientific and engineering report entitled, "The Flood Insurance Study for the City of Bunker Hill Village, Texas", dated June 2, 1980, with accompanying flood insurance rate maps and flood boundary-floodway maps (FIRM and FBFM) and any revisions thereto are hereby adopted by reference and declared to be a part of this chapter. The flood insurance study is on file, and may be examined, at the office of the city secretary.

## Section 4-84. Establishment of development permit.

A development permit shall be required to ensure conformance with the provisions of this chapter. It shall be unlawful for any person to cause or allow any development to or on any tract of land owned or occupied by such person without having first obtained a development permit therefore in accordance with this chapter.

#### Section 4-85. Compliance.

No structure or land shall be located, altered, or have its use changed without full compliance with the terms of this chapter and other applicable regulations.

## Section 4-86. Abrogation and greater restrictions.

This chapter is not intended to repeal, abrogate or impair any existing easements, covenants or deed restrictions. However, where this chapter and another provision conflict or overlap, whichever imposes the more stringent restrictions shall prevail. This chapter shall not be construed to permit any use of land not permitted by the zoning ordinance of the city.

## Section 4-87. Interpretation.

In the interpretation and application of this chapter, all provisions shall be:

- (1) Considered as minimum requirements;
- (2) Liberally construed in favor of the city council; and
- (3) Deemed neither to limit nor repeal any other powers granted under state statutes.

## Section 4-88. Warning and disclaimer of liability.

The degree of flood protection required by this chapter is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Greater floods can and will occur, and flood heights may be increased by manmade or natural causes. This chapter does not imply that land outside the areas of special flood hazards or uses permitted within such areas will be free from flooding or flood damages. This chapter shall not create liability on the part of the city or any official or employee thereof for any flood damages that result from reliance on this chapter or any administrative decision lawfully made thereunder.

#### Sections 4-89—4-125. Reserved.

## Division 2. Statutory authorization; Findings of fact; Purpose; Methods.

## Section 4-126. Statutory authorization.

Pursuant to V.T.C.A., Water Code § 16.311 et seq., municipalities have been delegated the responsibility to adopt rules and regulations necessary to minimize flood related damages. The imposition of such regulations are necessary to entitle such municipalities to qualify its citizenry for participation in the national flood insurance program. The city council hereby determines that the findings of fact in section 4-127 are true and correct, and that all regulatory and administrative provisions provided herein are necessary to promote and protect the health, safety, and general welfare of the citizens of the city.

## Section 4-127. Findings of fact.

- (a) The flood hazard areas of the city are subject to periodic inundation which threatens loss of life and property and results in health and safety hazards, disruption of commerce and governmental services, and extraordinary public expenditures for flood protection and relief, all of which adversely affect the public health, safety and general welfare.
- (b) The flood losses are caused by the cumulative effect of obstructions in floodplains which cause an increase in flood heights and velocities, and by the occupancy of flood hazard areas by uses vulnerable to floods and hazardous to other lands because they are inadequately elevated, flood proofed or otherwise protected from flood damage.

## Section 4-128. Purpose.

It is the purpose of this chapter to promote the public health, safety and general welfare and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:

- (1) Protect human life and health.
- (2) Minimize expenditure of public money for costly flood control projects.
- (3) Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public.
- (4) Minimize prolonged business interruptions.
- (5) Minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in floodplains.
- (6) Help maintain a stable tax base by providing for the sound use and development of flood-prone areas in such a manner as to minimize future flood blight areas.
- (7) Insure that potential buyers are notified that property is in a flood area.

## Section 4-129. Methods of reducing flood losses.

In order to accomplish its purposes, this chapter uses the following methods:

- (1) Restrict or prohibit uses that are dangerous to health, safety or property in times of flood, or cause excessive increases in flood heights or velocities.
- (2) Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction.
- (3) Control the alteration of natural floodplains, stream channels, and natural protective barriers, which are involved in the accommodation of floodwaters.
- (4) Control filling, grading, dredging and other development which may increase flood damage.
- (5) Prevent or regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands.

#### Sections 4-130—4-145. Reserved.

#### Division 3. Administration.

## Section 4-146. Building official as administrative officer.

The building official is hereby appointed to administer and implement the provisions of this chapter and other appropriate sections of 44 CFR (National Flood Insurance Program regulations) pertaining to floodplain management.

# Section 4-147. Duties, responsibilities of building official.

The duties and responsibilities of the building official shall include, but not be limited to, the following:

- (1) Maintain and hold open for public inspection all records pertaining to the provisions of this chapter.
- (2) Review permit applications to determine whether proposed building sites will be reasonably safe from flooding.
- (3) Review, approve or deny all applications for development permits required by adoption of this chapter.

- (4) Review permits for proposed development to assure that all necessary permits have been obtained from those federal, state or local governmental agencies (including Section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334) from which prior approval is required.
- (5) Where interpretation is needed as to the exact location of the boundaries of the areas of special flood hazards (for example, where there appears to be a conflict between a mapped boundary and actual field conditions) the building official shall make the necessary interpretation.
- (6) Notify, in riverine situations, adjacent communities and the state water commission prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the federal emergency management agency.
- (7) Assure that the flood-carrying capacity within the altered or relocated portion of any watercourse is maintained.
- (8) When base flood elevation data has not been provided in accordance with section 4-83, the building official shall obtain, review and reasonably utilize any base flood elevation data and floodway data available from a federal, state or other source, in order to administer the provisions of article IV.
- (9) When a regulatory floodway has not been designated, the building official must require that no new construction, substantial improvements, or other development (including fill) shall be permitted within Zones A1-30, and AE on the community's FIRM, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one (1) foot at any point within the community.

## Section 4-148. Permit procedures.

(a) Application for a development permit shall be presented to the building official on forms furnished by him and may include, but not be limited to, plans in duplicate drawn to scale showing the location, dimensions, and elevation of proposed landscape alterations, existing and proposed structures, and the location of the foregoing in relation to areas of special flood hazard. Additionally, the following information is required:

- (1) Elevation (in relation to mean sea level), of the lowest floor (including basement) of all new and substantially improved structures.
- (2) Elevation in relation to mean sea level to which any nonresidential structure shall be flood proofed.
- (3) A certificate from a registered professional engineer or architect that the nonresidential flood proofed structure shall meet the flood proofing criteria of section 4-167(2).
- (4) Description of the extent to which any watercourse or natural drainage will be altered or relocated as a result of proposed development.
- (5) Maintain a record of all such information in accordance with section 4-147(1).
- (b) Approval or denial of a development permit by the building official shall be based on all of the provisions of this chapter and the following relevant factors:
  - (1) The danger to life and property due to flooding or erosion damage.
  - (2) The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner.
  - (3) The danger that materials may be swept onto other lands to the injury of others.
  - (4) The compatibility of the proposed use with existing and anticipated development.
  - (5) The safety of access to the property in times of flood for ordinary and emergency vehicles.
  - (6) The costs of providing governmental services during and after flood conditions including maintenance and repair of streets, bridges and public utilities and facilities such as sewer, gas, electrical and water systems.
  - (7) The expected heights, velocity, duration, rate of rise and sediment transport of the floodwaters and the effects of wave action, if applicable, expected at the site.
  - (8) The necessity to the facility of a waterfront location, where applicable.

- (9) The availability of alternative locations, not subject to flooding or erosion damage, for the proposed use.
- (10) The relationship of the proposed use to the comprehensive plan for that area.
- (11) The impact on flood levels of adjacent and neighboring properties.
- (c) The building official may issue a development permit without an applicant submitting all or any part of the information required in subsection (a) above, if the application is for a development located wholly outside an area of special flood hazard, and such official determines that there exists sufficient available data relating to the information being waived.

## Section 4-149. Variance procedures.

- (a) The board of adjustment, as established by city's comprehensive zoning ordinance, shall hear and render judgment on requests for variances from the requirements of this chapter.
- (b) The board of adjustment shall hear and render judgment on an appeal only when it is alleged there is an error in any requirement, decision or determination made by the building official in the enforcement or administration of this chapter.
- (c) Any person aggrieved by the decision of the board of adjustment may appeal such decision in the courts of competent jurisdiction.
- (d) The building official shall maintain a record of all actions involving an appeal and shall report variances to the federal emergency management agency upon request.
- (e) Variances may be issued for the reconstruction, rehabilitation or restoration of structures listed on the national register of historic places or the state inventory of historic places, without regard to the procedures set forth in the remainder of this chapter.
- (f) Variances may be issued for new construction and substantial improvements to be erected on a lot of one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, providing the relevant factors in section 4-148(b) have been fully\_considered. As the lot size increases beyond the one-half acre, the technical justification required for issuing the variance increases.

- (g) Upon consideration of the factors noted above and the intent of this chapter, the board of adjustment may attach such conditions to the granting of variances as it deems necessary to further the purpose and objectives of this chapter.
- (h) Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result.
- (i) The following shall be prerequisites for the granting of variances:
  - (1) Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
  - (2) Variances shall only be issued upon:
    - i. Showing a good and sufficient cause;
    - ii. A determination that failure to grant the variance would result in exceptional hardship to the applicant; and
    - iii. A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances.
  - (3) Any applicant to whom a variance is granted shall be given written notice that the structure will be permitted to be built with the lowest floor elevation below the base flood elevation, and that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation.
- (j) Variances may be issued for new construction and substantial improvements and for other development necessary for the conduct of a functionally dependent use provided that the criteria outlined in subsections (a) through (i) above are met, and the structure or other development is protected by methods that minimize flood damages during the base flood and create no additional threats to public safety.

Sections 4-150—4-165. Reserved.

Division 4. Flood Hazard Reduction.

Section 4-166. General standards.

In all areas of special flood hazards the following standards apply for all new construction and substantial improvements:

- (1) All new construction or substantial improvements shall be designed (or modified) and adequately anchored to prevent flotation, collapse or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy.
- (2) All new construction or substantial improvements shall be constructed by methods and practices that minimize flood damage.
- (3) All new construction or substantial improvements shall be constructed with materials resistant to flood damage.
- (4) All new construction or substantial improvements shall be constructed with electrical, heating, ventilation, plumbing and air conditioning equipment and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.
- (5) All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system.
- (6) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into the system and discharge from the systems into floodwaters.
- (7) On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

## Section 4-167. Specific standards.

In all areas of special flood hazards where base flood elevation data has been provided as set forth in section 4-83, section 4-147(8), or section 4-168(d), the following provisions are required:

- (a) Residential construction. New construction and substantial improvement of any residential structure shall have the lowest floor (including basement) elevated to or above the base flood elevation. A registered professional engineer, architect or land surveyor shall submit a certification to the building official that the standard of this subsection as proposed in section 4-148(a)(1) is satisfied.
- (b) Nonresidential construction. New construction and substantial improvements of any commercial, industrial or other nonresidential

structure shall either have the lowest floor (including basement) elevated to or above the base flood level or, together with attendant utility and sanitary facilities, be designed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. A registered professional engineer or architect shall develop and/or review structural design, specifications, and plans for the construction, and shall certify that the design and methods of construction are in accordance with accepted standards of practice as outlined in this subsection. A record of such certification which includes the specific elevation (in relation to mean sea level) to which such structures are flood proofed shall be maintained by the building official.

- (c) Enclosures. New construction and substantial improvements, with fully enclosed areas below the lowest floor that are subject to flooding shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or meet or exceed the following minimum criteria:
  - 1. A minimum of two (2) openings having a total net area of not less than one (1) square inch for every square foot of enclosed area subject to flooding shall be provided.
  - 2. The bottom of all openings shall be no higher than one (1) foot above grade.
  - Openings may be equipped with screens, louvers, valves or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.

## (d) Manufactured homes:

- 1. Require that all manufactured homes to be placed within Zone A shall be installed using methods and practices which minimize flood damage. For the purpose of this requirement, manufactured homes must be elevated and anchored to resist flotation, collapse, or lateral movement. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. This requirement is in addition to applicable state and local anchoring requirements for resisting wind forces.
- 2. All manufactured homes shall be in compliance with subsection (1) above.

3. Require that all manufactured homes to be placed or substantially improved within Zones A1-30, AH and AE on the community's FIRM be elevated on a permanent foundation such that the lowest floor of the manufactured home is at or above the base flood elevation; and be securely anchored to an adequately anchored foundation system in accordance with the provision of subsection (4).

## Section 4-168. Standards for subdivision proposals.

- (a) All subdivisions shall be consistent with sections 4-127, 4-128 and 4-129.
- (b) All proposals for the development of subdivisions, including manufactured home parks and subdivisions, shall meet development permit requirements of section 4-84; section 4-148; and the provisions of this article.
- (c) Base flood elevation data shall be generated for subdivision proposals and other proposed development which is greater than five (5) acres, if not otherwise provided pursuant to section 4-83 or section 4-147(8).
- (d) All subdivisions shall have adequate drainage provided to reduce exposure to flood hazards.
- (e) All subdivisions shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize or eliminate flood damage.

## Section 4-169. Standards for areas of shallow flooding (AO/AH Zones).

Located within the areas of special flood hazard established in section 4-83 are areas designated as shallow flooding. These areas have special flood hazards associated with base flood depths of one (1) to three (3) feet where a clearly defined channel does not exist and where the path of flooding is unpredictable and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow; therefore, the following provisions apply:

- (a) All new construction and substantial improvements of residential structures have the lowest floor (including basement) elevated above the highest adjacent grade at least as high as the depth number specified in feet on the community's FIRM (at least two (2) feet if no depth number is specified).
- (b) All new construction and substantial improvements of nonresidential structures shall:

- 1. Have the lowest floor (including basement) elevated above the highest adjacent grade at least as high as the depth number specified in feet on the community's FIRM (at least two (2) feet if no depth number is specified); or
- 2. Together with attendant utility and sanitary facilities be designed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads of effects of buoyancy.
- (c) A registered professional engineer or architect shall submit a certification to the building official that the standards of this section, as proposed in section 4-148(a)(1), are satisfied.
- (d) Require within Zones AH or AO adequate drainage paths around structures on slopes, to guide floodwaters around and away from proposed structures.

#### Section 4-170. Floodways.

Located within areas of special flood hazard established in section 4-83, areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of floodwaters which carry debris, potential projectiles and erosion potential, the following provisions shall apply:

- (a) Encroachments are prohibited, including fill, new construction, substantial improvements and other development unless certification by a professional registered engineer or architect is provided demonstrating that encroachments shall not result in any increase in flood levels within the community during the occurrence of the base flood discharge.
- (b) If subsection (1) above is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of this article.

# Section 4-171. Standards applicable to all residential construction.

Generally. Compliance with the provisions of this section shall be a condition for the issuance of development permits for construction of buildings or structures used for residential purposes or for the material alteration of the grade of any lot or tract of land located within the city. For the purposes hereof, "material alteration of the grade" shall mean any alteration of the grade which would or could reasonably result in the diversion or alteration of the course of flow of stormwater runoff to a direction other than directly toward and into the

outfall drainage facility designed to receive stormwaters from such lot or tract of land, without traversing upon or across the land of any person other than the person who owns the lot or tract upon which the alteration is to occur.

- (a) Erosion and stormwater runoff controls and remedial actions shall be taken incident to all residential construction in accordance with the "Flood Prevention Plan for Residential Construction" as set forth in Appendix A, not included herein, and for all things made a part hereof. All such proposed control and remedial action shall be evidenced by the filing of the application as provided in such Appendix A.
- (b) Each lot or tract of land shall be served by an underground storm sewer system, designed and constructed to provide interior drainage for such lot or tract, and capable of receiving and transporting stormwaters for a minimum of a ten-year frequency storm. Inlets into such system shall be placed around the lot or tract, with consideration given for all permeable surfaces to be covered, so as to provide adequate collection of stormwaters necessary to prevent ponding or overflow onto adjacent properties. Such interior storm sewer system shall be designed and constructed to transport such stormwaters directly to the outfall facility designed to receive stormwaters from such lot or tract. No such storm sewer system shall use underground pipe of less than six (6) inches in diameter. Provided further, no slab for the foundation of any building or structure shall be poured, nor shall any material alteration of the grade of any lot or tract be commenced prior to the installation, inspection and approval of the interior storm sewer system required hereby.
- (c) No concrete slab floor elevation shall be less than twelve (12) inches above the top of the nearest sanitary sewer manhole, nor less than twelve (12) inches above either: 1) the crown of the street nearest thereto, if the street has curbs and gutters, or 2) the top of the nearest drainage inlet, if the street does not have curbs and gutters, whichever, in the discretion of the building official, better serves to further the purposes of this chapter. The standards prescribed in this subsection (3) shall be applied:
  - 1. For all new residential construction within the city; and
  - 2. When the cost of the rebuilding, repair, or modification of the structure exceeds fifty (50) percent of the value of the structure. For purposes of this subsection, the value of the structure shall be the average cost per square foot of all new construction within the city for the last three years based on certified values from the county appraisal district; and
  - 3. When the repair or modification of an existing structure involves structural modifications, including wall or ceiling board

replacement, in rooms constituting more than fifty (50) percent of the climate controlled square footage of the structure.

The requirements of this subsection (3) shall not apply: (1) to situations where the wall board replacement is for the lowest forty-eight (48) inches of the first floor of the structure within sixty (60) days of a verifiable water damage event, or (2) except in the case of new construction, when the property owner executes and returns to the city the nonconforming slab certificate in the manner and form prescribed by the building official.

#### Sections 4-172-4-180. Reserved."

Section 7. The Code of Ordinances of the City of Bunker Hill Village, Texas is further amended by deleting Article VII, Preservation of Trees, of Chapter 10, Offenses and Miscellaneous Provisions, in its entirety and adding a new Article VI, Tree Preservation, to Chapter 4, Building and Construction, with the new Article VI to read as follows: (Note: the tree ordinance is being moved to Chapter 4 with significant changes to the text).

#### "Article VI. Tree Preservation.

#### Section 4-181. Purpose.

It is the purpose of this ordinance to preserve and enhance the desirability of our city by requiring careful site planning; the protection of trees during new construction and remodeling; careful tree removal including removal of sick or dead trees; tree replacement; prohibiting indiscriminate cutting or clearing of trees; and encouraging the increase of our canopy cover while preserving the owners' rights to utilize and enjoy their property. The City has continued to emphasize the importance of our tree canopy since the first Tree Ordinance was adopted on February 20, 1996.

#### Section 4-182. Definitions

Tree shall mean a self-supporting woody plant with a single trunk, unbranched for several feet above the ground, supporting a definitely formed crown, with a minimum 3 inch diameter DBH and having a height of at least 12 feet.

Multiple-Trunk Tree shall mean a tree with two or more trunks visibly connected above the ground with a height greater than 15 feet (measurement of multi-trunk trees will be as follows; the diameter of the largest truck added to .50% of total diameter of remaining trunks with total no less than 8 inches DBH).

Qualified Tree shall mean tree which species is included on the City's approved planting tree list with a diameter between 15 and 20 inches DBH.

Protected Tree shall mean a tree which species is included on the City's approved planting tree list with a diameter over 20 inches DBH.

Healthy Tree shall mean a living, thriving tree, as defined above and confirmed with the City's Arborist or Forrester.

Replacement Tree shall mean a tree, which is a minimum of 3 inches in caliper (measured at 6 inches from the base of the tree) and at least 12 feet in height of a species included on the City's approved planting tree list

Tree Diameter shall mean the measurement used to determine the size of a tree; the tree diameter is measure in two ways as either DBH or caliper.

*DBH* shall mean the measurement used for planted trees, "Diameter at Breast Height", measured 4 feet, 6 inches from the ground level.

Caliper shall mean the measurement used for all trees to be planted: measured at 6 inches from the base of the tree.

Tree Ratio shall mean the expected minimum number of trees or tree trunks on a lot.

Tree Site Plan shall mean a plan indicating: 1) existing and proposed improvements/structure; 2) location of new tree plantings: 3) indicate all trees and/or multiple trees that are to be removed.

Tree Survey shall mean a plan indicating the following: 1) location of all existing trees and multiple trunk trees on a lot; 2) the diameter of each tree; 3) tree type; 4) the tree site plan should note all protected tree(s) and qualified tree(s).

#### Section 4-183. Minimum Tree Requirement

The minimum number of trees on each lot shall be one (1) tree for each one thousand (1,000) sq. ft of lot area. Trees located on the public right of way that are adjacent to a lot or parcel shall not be considered as part of the required number. For new construction, a minimum of 25% of the minimum number of trees shall be in the front yard of the property.

#### Section 4-184. Tree Permit Requirements

A tree permit is required for the removal of any and all trees greater than 5 inches in diameter, for any reason.

Exceptions for when a tree permit is not required.

- a) Any utility installation or maintenance by a public utility or their authorized contractor on utility easements or public right-of-way;
- b) Removal of all or part of a tree(s) that has disrupted public utility service, roadway, or is imminent danger of causing harm to people or property;
- c) Removal of any tree under 5" in diameter; or
- d) Any tree, which has fallen.

Removal of trees due to infestation, dead, or storm damaged trees is not an exception and does require a tree permit.

A tree permit for new construction, reconstruction, and expansion/additions is issued as part of the construction permit.

# Section 4-185. Tree Preservation, Removal and Replacement.

In order to preserve existing healthy, mature trees, the following table is provided to meet the minimum required tree count per lot.

Tree Classification and Size	Tree Count	Equivalent Tree Count
Qualified Tree 10-15 inch diameter	1 Trees	2
Protected Tree > 15 inch diameter	1 Trees	3

Should qualified and protected trees be preserved as indicated above, the following tables are provided for determining the minimum required tree and trunk count.

## District A - Requirements

The following Table is provided to determine the tree ratio for District A

A minimum number of trees/trunks	Tree Count	Minimum Trunk Count
Per 20,000 - 30,000 sq. ft.	1 per 1,000 SF	12
> 30,001 sq.ft	1 per 1,000 SF	17

**District B – Requirements**The following Table is provided to determine the tree ratio for District B

A minimum number of trees/trunks	Tree Count	Minimum Trunk Count	
Up to 12,999 sq ft	1 per 1,000 SF	5	
13,000 – 14,999 sq. ft	1 per 1,000 SF	8	
15, 000 - 19,999 sq ft	1 per 1,000 SF	10	
Over 20,000 sq. ft	Same Crite	ria as District A	

The following apply for removal and replacement of specified trees for both Districts

Tree(s) Proposed for Removal On the Approved Tree Planting List	Required Replacement	Replacement Number & Size Replacement Tree Must be on the Approved Tree Planting List
Any Tree (Healthy or Diseased) 5 - 10 inch diameter DBH	Must be replaced if the lot tree count does not meet minimum requirement;  Does not need to be replaced if tree count is met	1 Tree per every 1 removed Must be 3" or greater caliper
Over 5 Healthy Qualified Trees (10-15 inch diameter)	Must be replaced regardless of meeting minimum tree requirement, Can count toward minimum tree requirement	1 Tree per every 5 removed Must be 5" caliper and least 15' feet tall
Healthy Protected Tree > 15 inch diameter	Must be replaced regardless of meeting minimum tree requirement, Can count toward minimum tree requirement	2 Trees per every 1 removed Must be 5" caliper and least 15' feet tall

These requirements apply to all situations including planning for new construction and remodeling/expansion/additions as well as proposed tree removal by existing property owners.

Any homeowner in continuous ownership of their home since before February 20, 1996 can remove a tree, remodel or expand without meeting the provisions of this section. However, all new construction and reconstruction must meet these requirements.

## Section 4-186. New Construction, Reconstruction and Expansion/Additions.

#### (1) Pre-Development Planning.

A pre-development meeting is required for all new construction and remodeling/expansion/additions as noted in Article 1, Section 4-4. New construction and remodeling/expansion/additions add to the building footprint of the site and will be required to meet the minimum tree requirements as defined per the Zoning District.

## (2) Tree Survey.

A tree survey is required for new construction and remodeling/expansion/additions.

The tree survey needs to indicate the following:

- a) Existing trees and multiple trunk trees by location, species, and size;
- b) Condition of all existing and multiple trunk trees; and
- c) Calculation showing the minimum tree requirement and how the tree requirement will be met in coordination with the improvements.

#### (3) Tree Site Plan.

A tree site plan which depicts all proposed improvements and all trees preserved or planned to meet the minimum tree requirement is required for new construction and remodeling/expansion/additions.

Upon approval of the tree site plan and construction plans, a construction permit will be issued and includes the permitting of all trees to be removed or planted.

Any plantings within a CenterPoint Energy Utility Easement must meet CenterPoint Energy's "Right Tree-Right Place" Program.

#### (4) One-year Inspection

The City will complete a one-year inspection within 11-15 months after a final certificate of occupancy permit has been issued. A one-year review of the minimum tree requirement will be conducted to ensure the required healthy tree

count for new construction or remodeling. The inspection will include the following:

- (a) City will evaluate and count all trees to meet minimum tree requirement per Zoning District;
- (b) The City will inspect trees on adjacent/neighboring property that were within 10 feet of the construction and requested tree protection;
- (c) All stakes that were necessary for installation shall be removed; and
- (d) Should the lot no longer meet the minimum tree requirement as shown on the approved site plan; the owner will have 14 days to ensure the minimum tree requirement is met and to avoid any fees and penalties.

#### Section 4-187. Tree Protection.

Tree protection as follows is required during new construction and remodeling/expansion/additions:

- (1) All healthy trees within 10 feet of construction will be protected. Protection will be placed no closer than two feet (2') from the trunk.
- (2) Tree Protection will consist of metal fencing, at least 48" high, with posts no more than 6 feet apart and be placed at the drip line of the canopy of each tree to be preserved. An opening shall be left in each fence enclosure of not more than eighteen (18) inches to allow access for maintenance of grass and vegetation.
- (3) All healthy trees that are within 10 feet of the construction and are on an adjacent/neighboring lot will be protected at the request of the adjacent/neighboring property owner; a waiver form will need to be signed and provided by the applicant verifying that adjacent/neighboring property owner(s) do not request tree protection.
- (4) NO Tree within 10 feet (including those trees which count towards the minimum tree requirements or a tree adjacent/neighboring the construction) shall be impacted by cutting over 40% of its root zone.
- (5) Trees within the 10 foot impact area will be required to have a root prune clean cut and a vapor barrier installed if the construction consists of a below grade structure such as a slab. A city inspection is required before pouring concrete.

- (6) All trees outside of the 10 foot construction area, must also be protected; however, the fencing may not be placed within 2 feet of the trunk.
- (7) Trees must be numbered and taped relating to each tree depicted on the Tree Survey. Orange tape will indicate removal of the tree on the property; Green tape will indicate trees to remain on the property.
- (8) The required construction fencing can be utilized to serve as tree protection for perimeter and adjacent/neighboring trees with approval through the permitting process.

# Section 4-188. Approved Tree Planting List.

The following trees are acceptable trees that can be planted and will count towards the minimum tree requirement per Zoning District.

# Large Trees

Acacia
Green Ash
White Ash
Bald Cypress
Montezuma Cypress
American Elm
Cedar Elm
Eastern Red Cedar
Lacebark Elm
Winged Elm

Ginko

Any Hickory

Ironwood
Japanese Magnolia
Red Drummond Maple
Trident Maple
Any Oak
Pecan
Loblolly Pine
Yellow Poplar
Sycamore
Sweetgum
Tulip Tree Black Walnut
Walnut

#### **Medium Trees**

Anacua
River Birch
Fringe Tree
American Holly
Burford Holly
East Palatka Holly (single item)
Savannah Holly (single stem)
Cherry Laurel
Chinese Pistache
Mexican Plum
Eastern Redbud
Japanese Yew

# Section 4-189. Tree Requirement List.

The following trees are acceptable trees that will count towards the minimum tree requirement per Zoning District. In order to count toward the minimum tree requirement, trees must be a minimum of 3" in Diameter and 12" in height.

# Large Trees

Acacia

Arizona Ash

Green Ash

White Ash

Camphor

Catalpa

Eastern Red Cedar

Bald Cypress

Montezuma Cypress

American Elm

Cedar Elm

Chinese Elm

Lacebark Elm

Winged Elm

Ginko

Hackberry

Any Hickory

Youpon Holly

Ironwood

Any Magnolia

Japanese Magnolia

Red Drummond Maple

Trident Maple

Any Oak

Pecan

Loblolly Pine

Slash Pine

Yellow Poplar

Chinese Tallow

Sweetgum

Sycamore

Walnut

Tulip Tree Black Walnut

Willow

#### **Medium Trees**

Anacua

Crape Myrtles (multi-stem or single with 8" total diameter)

River Birch

Fringe Tree

American Holly

Burford Holly

East Palatka Holly (single stem)

Savannah Holly (single stem)

Cherry Laurel

**Bradford Pear** 

Chinese Pistache

Mexican Plum Eastern Redbud

Japanese Yew

Running Bamboo is not allowed to be planted in the City of Bunker Hill Village.

#### Section 4-190. Enforcement and Penalties and Fines.

- (1) The city building official can charge a fee in an amount equal to twice the applicable permit fee for not getting a tree permit, failure to submit a tree survey and tree site plan, or failure to follow any aspect of the tree ordinance; and
- (2) The Building Official may deem it necessary to issue a temporary occupancy permit, after completion of new construction, remodels, additions, an increase of the existing concrete footprint, driveways, pools, outdoor patio and/or kitchen or any change to the building plat. This temporary permit cannot exceed 3 months without fines and/or penalties.

#### Section 4-191. Appeals/reviews.

- (1) Any property owner, whose property does not comply with the Tree Ordinance and wants to appeal their situation, can file a written request to the City Secretary for City Council to review.
- (2) City Council may make a decision as deemed necessary and appropriate regarding any variance to Tree Ordinance."

#### Sections 4-192-200. Reserved."

Section 8. The Code of Ordinances of the City of Bunker Hill Village, Texas is further amended by deleting Article II, Outdoor Lighting, of Chapter 10, Offenses and

Miscellaneous, in its entirety and adding a new Article VII, Outdoor Lighting, to Chapter 4, Building and Construction, with the new Article VII to read as follows: (Note: these regulations currently exist in Article II of Chapter 10 and are being moved to Chapter 4 with no changes to text).

## "Article VII. Outdoor Lighting.

#### Section 4-201. Not to disturb others.

It shall be unlawful for any person to cause or permit to be energized on property under his possession or control any outdoor lighting including, but not limited to, spotlights, floodlights or similar illuminating devices which project a glare or brightness, directly or indirectly, upon any lot, tract, or parcel of land, other than that upon which such outdoor lighting is situated, which shall annoy, disturb, injure or endanger the comfort, repose, health, peace or safety of others, within the limits of the city.

#### Section 4-202. Indirect illumination.

All outdoor lighting in the city consisting of spotlights, floodlights, or similar illuminating devices shall be installed, hooded, regulated and maintained by the owner or person in control thereof in such a manner that the direct beam of any such light shall be cast downward so that it will not glare upon any lot, tract, or parcel of land other than that upon which it is situated and so that it will not cause or permit any illumination from indirect lighting in excess of 0.5 footcandle in, on, or over the ground at or beyond the boundary of the lot, parcel, or tract.

#### Section 4-203. Location at game courts.

Notwithstanding any other provision of this article, it shall be unlawful for any person to construct or install any outdoor lighting designed or used for the illumination of a tennis court, paddle ball court or other type game court unless all of the area occupied by such court is at least twenty-five (25) feet from all boundary lines of the property upon which such court is situated.

#### Section 4-204. Inspection, fee.

(a) Upon completion of any outside lighting installation for which a permit has been issued in accordance with the building code of the city, the electrician shall call for a compliance inspection to be made during nighttime hours, with an accurate light meter. The inspection shall be made with the city administrator and the electrician responsible for the

- installation present. An accurate light meter, used for the inspection, shall be furnished by the electrician.
- (b) The outside lighting permit fee, which shall include the cost of one (1) inspection, and fees for additional inspections or re-inspections, shall be in such amounts as may be established from time to time by city council.

# Section 4-205. Hours of operation at game courts.

All outdoor lighting designed or used for the purpose of illuminating tennis courts, paddle ball courts, or other type game courts shall be extinguished not later than 10:00 p.m. and shall not be turned on again until after 8:00 a.m. of the following day.

# Section 4-206. Exemption.

The provisions of this article shall not apply to lights operated by or under the direction of the city.

#### **Sections 4-207—4-220. Reserved.**"

- Section 9. Repeal. All ordinances or parts of ordinances inconsistent or in conflict herewith are, to the extent of such inconsistency or conflict, hereby repealed.
- Section 10. Penalty. Any person who shall violate any provision of this Ordinance shall be deemed guilty of a misdemeanor and, upon conviction, shall be fined in an amount not to exceed \$2000. Each day of violation shall constitute a separate offense.
- Section 11. Severability. In the event any section, paragraph, subdivision, clause, phrase, provision, sentence, or part of this Ordinance or the application of the same to any person or circumstance shall for any reason be adjudged invalid or held unconstitutional by a court of competent jurisdiction, it shall not affect, impair, or invalidate this Ordinance as a whole or any part or provision hereof other than the part declared to be invalid or unconstitutional; and the City Council of the City of Bunker Hill Village, Texas, declares that it would have passed each

and every part of the same notwithstanding the omission of any such part thus declared to be invalid or unconstitutional, or whether there be one or more parts.

PASSED, APPROVED, AND ADOPTED this 21st day of October, 2014.

Jay Williams

Mayor

ATTEST:

Kelly Johnson /

City Secretary