## ORDINANCE NO. 2009-46 FLOOD DAMAGE PREVENTION

AN ORDINANCE AMENDING FLOODPLAIN MANAGEMENT REGULATIONS; DESIGNATING THE FLOODPLAIN ADMINISTRATOR; AMENDING SPECIFIC STANDARDS; ESTABLISHING A FLOOD SURGE HAZARD AREA; SAVINGS CLAUSE; AND, SEVERABILITY CLAUSE.

BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF SHOREACRES, STATE OF TEXAS:

If any section, clause, sentence, or phrase of this Ordinance is held to be invalid or unconstitutional by any court of competent jurisdiction, then said holding shall in no way affect the validity of the remaining portions of this Ordinance; and,

That section 30-66 of the Shoreacres City Code is hereby amended to read as follows:

### SECTION 30-66. DESIGNATION OF THE FLOODPLAIN ADMINISTRATOR

The [Mayor] <u>City Administrator</u> is hereby appointed the Floodplain Administrator to administer and implement the provisions of this ordinance and other appropriate sections of 44 CFR (Emergency Management and Assistance - National Flood Insurance Program Regulations) pertaining to floodplain management.

That section 30-92 of the Shoreacres City Code is hereby amended to read as follows:

#### SECTION 30-92. SPECIFIC STANDARDS

In all areas of special flood hazards where base flood elevation data has been provided as set forth in (i) Section 30-70, (ii) Section 30-67 (8), or (iii) Section 30-93 (3), the following provisions are required:

- (1) **Residential Construction** new construction and substantial improvement of any residential structure shall have the lowest floor (including basement <u>and all attendant utilities</u>), elevated to or above the base flood elevation <u>plus one foot free-board</u>. A registered professional engineer, architect, or land surveyor shall submit a certification to the Floodplain Administrator that the standard of this subsection as proposed in Section 30-69(1)(a), is satisfied.
- (2) **Nonresidential Construction** new construction and substantial improvements of any commercial, industrial or other nonresidential structure shall either have the lowest floor (including basement <u>and all attendant utilities</u>) elevated to or above the base flood level <u>plus one foot free-board</u> or together with attendant utility and sanitary facilities, be designed so that below the base flood level <u>plus one foot free-board</u> 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 floodproofed shall be maintained by the Floodplain Administrator.

- (3) **Enclosures** new construction and substantial improvements, with fully enclosed areas below the lowest floor that are usable solely for parking of vehicles, building access or storage in an area other than a basement and which 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:
- (a) A minimum of two openings on separate walls having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided.
- (b) The bottom of all openings shall be no higher than 1 foot above grade.
- (c) Openings may be equipped with screens, louvers, valves, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.

#### (4) Manufactured Homes -

- (a) Require that all manufactured homes to be placed within Zone A on a community's FHBM or FIRM shall be installed using methods and practices which minimize flood damage. For the purposes 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.
- (b) Require that manufactured homes that are placed or substantially improved within Zones A1-30, AH, and AE on the community's FIRM on sites (i) outside of a manufactured home park or subdivision, (iii) in a new manufactured home park or subdivision, or (iv) in an expansion to an existing manufactured home park or subdivision on which a manufactured home has incurred "substantial damage" as a result of a flood, be elevated on a permanent foundation such that the lowest floor of the manufactured home is elevated to or above the base flood elevation plus one foot free-board and be securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.

- (c) Require that manufactured homes be placed or substantially improved on sites in an existing manufactured home park or subdivision with Zones A1-30, AH and AE on the community's FIRM that are not subject to the provisions of paragraph (4) of this section be elevated so that either:
- (i) the lowest floor of the manufactured home is at or above the base flood elevation <u>plus one foot free-board</u>, or
- (ii) the manufactured home chassis is supported by reinforced piers or other foundation elements of at least equivalent strength that are no less than 36 inches in height above grade and be securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.
- (5) **Recreational Vehicles** Require that recreational vehicles placed on sites within Zones A1-30, AH, and AE on the community's FIRM either (i) be on the site for fewer than 180 consecutive days, or (ii) be fully licensed and ready for highway use, or (iii) meet the permit requirements of Section 30-69(1), and the elevation and anchoring requirements for "manufactured homes" in paragraph (4) of this section. A recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached additions.

That the Shoreacres City Code is hereby amended by adding a section, to be numbered 30-97 which section reads as follows:

# SECTION 30-97. BASIS FOR ESTABLISHING THE FLOOD SURGE HAZARD AREAS

The areas of flood surge hazard is hereby identified by the City of Shoreacres as the entirety of the area east of Sunrise Drive to the shoreline of Galveston Bay within the jurisdiction of the City of Shoreacres. The City Council finds and declares that the area set forth in this section was inundated by waters from tidal surge and hurricane wave wash on or about September 13, 2008.

That the Shoreacres City Code is hereby amended by adding a section, to be numbered 30-98 which section reads as follows:

#### SECTION 30-98. FLOOD SURGE HAZARD AREAS

Located within the areas of flood surge hazard established in Section 30-97, are areas designated as Coastal High Hazard Areas (Zones V1-30, VE, and/or V) and special flood hazard areas (Zone AE) east of Sunrise Drive to the shoreline of Galveston Bay. These areas have flood surge hazards associated with waters from tidal surges and hurricane wave wash where the control of fill and grading may reduce flood damage; therefore, in addition to meeting all provisions outlined in this ordinance, the following provisions must also apply:

(1) All new construction and substantial improvements in Coastal High Hazard Areas (Zones V1-30, VE, and/or V) shall be elevated on pilings and

columns so that the bottom of the lowest horizontal structural member of the lowest floor (excluding the pilings or columns) is elevated to or above the base flood level plus one foot free-board.

- (2) All new construction and substantial improvements in special flood hazard areas (Zone AE) shall be elevated on pilings and columns so that the lowest floor is elevated to or above the base flood elevation plus one foot free-board.
- (3) The pile column foundation and the structure attached thereto are anchored to resist floatation, collapse, and lateral movement due to the effects of wind and water loads.
- (4) New construction and substantial improvements have the space below the lowest floor free of obstruction or enclosed with non-supporting breakaway walls, or open lattice work.
- (5) A registered professional engineer or architect must develop or review the structural design, specifications, and plans and certify that the designs and methods of construction to be used meet accepted standards of practice for meeting the provisions of CFR 60.3(e)(4)(ii) and breakaway walls (§60.3(e)(7)).
  - (6) Prohibit the use of fill for structural support of buildings.
- (7) Prohibit the use of fill to raise the grade of any lot above the minimum required to achieve proper drainage.

The City Council officially finds, determines, recites, and declares that a sufficient written notice of the date, hour, place and subject of this meeting of the City Council was posted at a place convenient to the public at the City Hall of the City for the time required by law preceding this meeting, as required by the Open Meetings Law, Chapter 551, Texas Government Code; and that this meeting has been open to the public as required by law at all times during which this ordinance and the subject matter thereof has been discussed, considered and formally acted upon. The City Council further ratifies, approves and confirms such written notice and the contents and posting thereof.

This Ordinance shall be effective from and after its passage and approval, and it is so ordered.

PASSED AND APPROVED this the 10TH day of AULUST 2009

Jayo Washington, Mayor

ATTEST:

David K. Stall