



## CITY OF TREASURE ISLAND AGENDA COVER MEMORANDUM

July 19, 2011

Item No. H-1

**DATE:** July 11, 2011

**TO:** Reid Silverboard, City Manager

**FROM:** Paula Cohen, Senior Planner

**THROUGH:** Lynn Rosetti, AICP, City Planner

**SUBJECT:** Ordinance No. 11-09 – Amendment of Chapter 66, Flood Control for Higher Regulatory Standards for Flood Hazard Reduction

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### **Background:**

In August 2010, the Mitigation Planning Committee, (which is required for participation in the Federal Flood Insurance Program), recommended an amendment to the Flood Plain Management Regulations to require two (2) feet of freeboard for all new construction.

There are 5916 flood insurance policies in Treasure Island. The value of the flood insurance in force in the City of Treasure Island is \$1,124,754,400.00. Under the City's current Community Rating System (CRS) class of 7, qualified flood insurance policyholders receive a 15% discount. There will be a 5-year review of the City's CRS program in August 2011. Adoption of higher regulatory standards should be favorable to the program reviewer since such regulations often lead to reduction in flood claims for both structural damage and content loss. The adoption of this proposed Ordinance will hopefully assist the City of Treasure Island in maintaining the current Class 7 rating or possibly help the City to improve to a Class 6 rating resulting in a 20% discount to qualified flood insurance policy holders.

As part of the rewrite of the City's Land Development Regulations, staff re-drafted Chapter 66, Flood Control.

### **Discussion:**

The amendments to Chapter 66, Flood Control provide for the following higher regulatory standards:

- To increase the minimum lowest floor from "base flood elevation" to "base flood elevation plus 2 feet" for all new construction or substantial improvement of any structure; except non-residential construction which is flood-proofed in lieu of

elevating the structure. The additional height above the base flood elevation is called freeboard.

- To increase the minimum level of flood-proofing for non-residential construction from base flood elevation to 2 feet above base flood elevation.
- To require all new and substantially-improved structures in the “A” flood zone to build the foundation to “V” flood zone standards. Specifically all pilings and columns and attached structures shall be anchored to resist floatation, collapse and lateral movement due to the effect of wind and water loads acting simultaneously on all building components. The anchoring and support system shall be designed with wind and water loading values which equal or exceed the 100-year mean recurrence interval (one percent annual chance of flooding). A “V” foundation will reduce the amount of damage resulting from scour and settling. There shall be no fill used as structural support.

It is not anticipated that this requirement will lead to an increase in building height. If you will recall in 2004, there were several issues under discussion regarding the allowed heights of buildings. This discussion included requiring up to 2 feet of freeboard. To accommodate these issues, the overall height allowances citywide were increased 5 feet in all categories by referendum.

The proposed changes will:

- Reduce flood damage to insurable property;
- Likely improve the City’s CRS score; and
- Provide flood insurance policyholders whose homes are built with 2 feet of freeboard a reduction in flood insurance premium.

#### Reduce Flood Damage

The “A” flood zone assumes that a structure is only subject to rising flood waters. The “V” flood zone is subject to both rising water and wave action. As a coastal community, Treasure Island is subject to severe storm and hurricane events where wave action may exceed the “V” zone boundaries established on the FEMA Flood Insurance Rate Maps. A piling foundation is more resistant to damage.

Non-residential structures will still be provided the opportunity to flood-proof, as described in Section 66-92(2). That existing provision of the code addresses hydrostatic load, hydrodynamic load and buoyancy. Hydrostatic loads refer to the pressures caused by rising flood waters. Hydrodynamic loads refer to pressures against the foundation caused by wave action. A registered professional engineer or architect for the development of a nonresidential project must certify that all of flood-proofing requirements fulfilled during construction. The only recommended change to Section 66-92(2) would be that the non-residential structure must be flood-proofed to 2 feet above base flood elevation rather than the base flood elevation.

Improvement of City’s CRS Score

Credit for freeboard is an approved activity under the CRS program for establishing a higher regulatory standard.

The Building Official, upon review of numerous geotechnical reports finds that in most cases a shallow, spread footing is not a suitable foundation to support a proposed structure, due to the filled soils in the City.

Increasing the required height a nonresidential structure must flood-proof further establishes a higher standard of regulation in the community.

The amount of points assigned to Treasure Island under the CRS for any of these recommended changes is subject to review and approval by the CRS reviewer.

Savings to Qualified Flood Insurance Policyholders

According to the FEMA Flood Insurance Manual, the elevation of the lowest floor above or below base flood elevation directly factors into the cost of the flood insurance premium for both building and contents. Each foot above or below the base flood elevation equates to a rating upon which the amount of insurance is multiplied.

Below is a simple example of how two residential structures in the “V” velocity zone may be rated differently for the flood insurance on the “building” portion of the policy.

At base flood elevation, the building rate is 2.34.

At base flood elevation plus 2 feet, the building rate is 1.12.

	<u>Amount of Insurance</u>	X	<u>Rate</u>	=	<u>Annual Premium</u>
Built at base flood elevation	\$60,000	X	2.34	=	\$1,404.00
Built at base flood elevation + 2 ft.	\$60,000	X	1.12	=	\$ 672.00

There are comparable differences in rates for contents and additional insurance for the value of the structure based on the elevation of the first habitable floor.

It is unclear from the FEMA Flood Insurance Manual if the type of foundation is factored into the rating of the policy. Generally, insurance agents rate a flood policy using a computer software program.

It should be noted that in addition to the specific changes outlined above, there will be new and revised definitions and updated verbiage in the proposed Ordinance amendment to address antiquated terminology and Section references.

Additional Comments from the Local Planning Agency

There was a discussion at the February 17, 2011 LPA meeting regarding the setback of homes built to base flood elevation plus 2.0 feet of freeboard. The discussion centered-around the possibility of allowing the front stairs to encroach into the center 1/3 of the front setback. There

was also the thought of possibly changing the rear setback to allow a staircase from the back of the home. While staff understands what the LPA is trying to achieve; it may not be the right time to include either of those changes in the code.

- To include a change of setback in Chapter 66 would make the Land Development Regulations even more complex to administer, as staff continues to go to numerous sections and individual caveats of the code book to determine what regulations apply in each situation.
- The change in the front setback may drastically change the appearance of some neighborhoods. Together we need to look at this proposed change with respect to all areas of the City.
- A change in the rear setback could impact a neighbor's waterfront view.
- Staff will need to see if a maximum staircase width needs to be determined and/or establish a maximum number of steps encroaching into the setback.
- The Land Development Regulations are in the process of being re-written. It is unlikely that there will be 15 pages of setback information for the zoning districts once the re-write is complete. It would be difficult and wordy to insert a setback caveat or provision at this time.

During the July 6, 2011 City Commission workshop presentation, a flood insurance premium comparison was discussed to identify the cost difference between a dwelling unit built at base flood elevation versus a dwelling unit built zone at base flood elevation plus 2.0 feet of freeboard in the "V" flood zone.

In order to better understand the differences in the flood premiums for a dwelling unit by the height of the lowest habitable floor, staff prepared Exhibit 1 which includes the following information:

- Source of information: Flood Insurance Manual – Revised October 2010;
- Listing of the Coverage Limits under the National Flood Insurance Program;
- "V" zone table from the Flood Insurance Manual showing the rates based on the elevation of the lowest habitable floor;
- Computation by staff of the flood insurance premium for a "V" zone property, where the dwelling unit was built at base flood elevation versus a dwelling built at base flood elevation plus 2.0 feet of freeboard;
- "A" zone table from the Flood Insurance Manual showing the rates based on the elevation of the lowest habitable floor; and
- Computation by staff of flood insurance premium for an "A" zone property, where the dwelling unit was built at base flood elevation versus a dwelling built at base flood elevation plus 2.0 feet of freeboard.

**Recommendation:**

Staff recommends Commission approval on first reading of Ordinance 11-09 amending Chapter 66, Flood Control.

Attachments:

- Ordinance No. 11-09
- Mitigation Planning Committee minutes, August 27, 2010
- Local Planning Agency Minutes, February 17, 2011
- Local Planning Agency Minutes, June 14, 2011

**EXHIBIT 1**

**SUPPLEMENTAL FLOOD INSURANCE INFORMATION**

**ORDINANCE NO. 11-09**

**AN ORDINANCE OF THE CITY OF TREASURE ISLAND, FLORIDA, PERTAINING TO CHAPTER 66, FLOOD CONTROL, ARTICLE II, FLOOD CONTROL BUILDING REQUIREMENTS; AMENDING CHAPTER 66 IN ITS ENTIRETY TO PROVIDE FOR DEFINITIONS CONSISTENT WITH THE NATIONAL FLOOD INSURANCE PROGRAM, PROVIDING FOR REFERENCE TO THE CURRENT FLOOD INSURANCE RATE MAP FOR THE CITY OF TREASURE ISLAND, PROVIDING FOR CONFORMANCE WITH THE FLORIDA BUILDING CODE, CHAPTER 553, FLORIDA STATUTES, PROVIDING FOR CORRECTIONS OF TERMS AND INTERNAL REFERENCES WITHIN THE ARTICLE, PROVIDING FOR HIGHER REGULATORY STANDARDS FOR ALL NEW CONSTRUCTION OR SUBSTANTIAL IMPROVEMENT PROJECTS; PROVIDING FOR SEVERABILITY; PROVIDING FOR AN EFFECTIVE DATE.**

**WHEREAS**, the City of Treasure Island participates in the Community Rating System program to further the goals of the National Flood Insurance Program and encourage flood loss reduction activities within the community and provide a discount to qualified flood policy holders; and,

**WHEREAS**, the City of Treasure Island's Mitigation Planning Committee for the Community Rating System program recommended the Flood Control Ordinance be amended to provide 2 feet of freeboard for all new construction; and,

**WHEREAS**, the City of Treasure Island has embarked upon a comprehensive project to rewrite the Land Development Regulations which includes Chapter 66, Flood Control; and,

**WHEREAS**, a review of Chapter 66, Flood Controls found differences in definitions and terms in the Ordinance than those established in the regulations for the National Flood Insurance Program under the Code of Federal Register; and,

**WHEREAS**, the width of the city limits from east to west is narrow leaving the "A" zone properties of Treasure Island susceptible to both rising water and wave action in a storm event; rather than only rising water; and,

**WHEREAS**, the filled soils of the Treasure Island community create concerns of structural integrity for multilevel structures using only shallow spread footings; and,

**WHEREAS**, the City's Building Official recommends both the 2.0 feet of freeboard and the V zone foundation standards inclusive of pier and column foundations for all A zone new construction and substantial improvement projects for flood loss reduction in the community; and,

**WHEREAS**, the 5-year review of the City of Treasure Island Community Rating System program is scheduled for August 2011; and,

**WHEREAS**, higher and more stringent regulatory standards for new construction and substantial improvement projects are favorably scored under the Community Rating System program; and,

**WHEREAS**, the Planning and Zoning Board, sitting as the Local Planning Agency conducted its review and is recommending changes to Chapter 66, Flood Control to provide for amendments throughout the Chapter 66, Flood Controls and higher regulatory standards for new construction and substantial improvements projects; and

**WHEREAS**, the Planning and Zoning Board, sitting as the Local Planning Agency reviewed these changes and finds them consistent with Treasure Island’s Comprehensive Plan and its elements thereof.

**WHEREAS**, the Planning and Zoning Board, sitting as the Local Planning Agency, recommends the passage of the proposed amendments to Chapter 66, Flood Control of the Land Development Regulations and further finds that such amendment is consistent with the adopted Comprehensive Plan and related elements of the City of Treasure Island, Florida; and,

**WHEREAS**, the City Commission concurs with the findings and recommendation of the Planning and Zoning Board, sitting as the Local Planning Agency regarding the proposed amendments to Chapter 66, Flood Control of the Land Development Regulations.

**NOW, THEREFORE, THE CITY OF TREASURE ISLAND, FLORIDA, DOES ORDAIN:**

**SECTION 1.** Chapter 66, Flood Control, Article II, Flood Control Building Requirements of the Land Development Regulations of the City of Treasure Island, Florida is hereby amended to read as follows:

**ARTICLE II. FLOOD CONTROL BUILDING REQUIREMENTS  
DIVISION 1. GENERALLY**

**Section 66-42. Definitions**

The following words, where used in this article, shall have the meaning ascribed herein unless the context clearly indicates otherwise:

“A” Zone means the special flood hazard areas inundated by a 100-year flood on the Flood Insurance Rate maps.

*Addition* (to an existing building) means any walled or roofed expansion to the perimeter of a building in which the addition is connected by a common load bearing wall other than a fire wall. Any walled and roofed addition which is connected by a fire wall or is separated by independent perimeter loadbearing walls is new construction.

*Appeal* means a request for a review of the City's interpretation of any provision of this chapter or a request for a variance.

*Area of special flood hazard* means the land in the floodplain within a community subject to a one percent or greater chance of flooding in any given year.

*Base flood* means the flood having a one percent chance of being equaled or exceeded in any given year also known as the “100-year” or “1% chance” flood. The base flood is a statistical concept used to ensure that all properties subject to the National Flood Insurance Program are protected to the same degree against flooding.

*Base Flood Elevation* means the elevation of the crest of the base or 100-year flood.

*Basement* means that portion of a building having its floor sub grade (below ground level) on all sides.

*Breakaway wall* means a wall that is not part of the structural support of the building and is intended through its design and construction to collapse under specific lateral loading forces without causing damage to the elevated portion of the building or the supporting foundation system.

*Building* means any structure having a roof supported by columns or walls designed or built for the support, enclosure, shelter or protection of persons, animals, chattels, or property of any kind.

*Building height* means the vertical distance from base flood elevation plus 2.0 feet of freeboard to the

highest point of the building, not including those structures specifically permitted to extend beyond the height of the building.

*Coastal building zone* means the land area from seasonal high-water line landward to a line 1,500 feet landward from the coastal construction control line as established pursuant to F.S. § 161.053, and for those coastal areas fronting on the Gulf of Mexico, Atlantic Ocean, Florida Bay, or Straits of Florida and not included under F.S. § 161.053, the land area seaward of the most landward velocity zone (V zone) line as established by the Federal Emergency Management Agency and shown on flood insurance rate maps.

*Coastal high hazard area (CHHA)* means ~~the area subject to high velocity waters caused by, but not limited to, hurricane wave wash. The area is designated on a FIRM as Zone V1-38, VE or V. the evacuation zone for a Category 1 hurricane. (Section 163.3178(2)(h), Florida Statutes). Hurricane evacuation zones are established in the regional hurricane evacuation study applicable to the local government.~~

*Datum* means a reference surface used to ensure that all elevation records are properly related. Many communities have their own datum, developed before there was a national standard. The National Flood Insurance Program uses the National Geodetic Vertical Datum (NGVD) of 1929 and the North American Vertical Datum (NAVD) of 1988, which are in relation to sea level. The Flood Insurance Rate map indicates the datum that applies to the community.

*Development* means any construction, structures, creation of structures or alteration of the land surface or natural resources which requires authorization by the City through issuance of a development order.

*Elevated building* means a nonbasement building built to have the lowest floor elevated above the ground level by means of fill, solid foundation perimeter walls, pilings, columns (posts and piers), shear walls or breakaway walls.

*Fair market value* means the value of property or structures, as used in the definition of substantial improvement, as determined by the county property appraiser, or M.A.I. or S.R.A. appraisal, either before the improvement was started, or if the structure has been damaged and is being restored, before the damage occurred.

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

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

*Flood hazard boundary map (FHBM)* means an official map of a community, issued by the Federal Emergency Management Agency, where the boundaries of the areas of special flood hazard have been defined as Zone A.

*Flood insurance rate map (FIRM)* means an official map of a community, on which the Federal Emergency Management Agency has delineated both the areas of special flood hazard and the risk premium zones applicable to the community.

*Flood insurance study* means the official report provided by the Federal Emergency Management Agency. The report contains flood profiles, as well as the flood boundary floodway map and the water surface elevation of the base flood.

*Flood proofing* means a combination of structural and/or nonstructural additions, changes or adjustments to properties or structures subject to flooding which will reduce or eliminate flood damages to properties, water and sewer facilities, structures and contents of buildings.

*Floor* means the top surface of an enclosed area in a building (including basement), i.e., top of slab in concrete slab construction or top of wood flooring in wood frame construction. The term does not include the floor of a garage used solely for parking vehicles.

*Freeboard* means a level higher than the base flood elevation. It is a factor of safety usually expressed in feet above a flood level for purposes of floodplain management. Freeboard compensates for the many unknown factors that could contribute to flood heights greater than the height calculated for a selected size flood and floodway conditions, such as wave action or the hydrological effect of urbanization on the watershed.

*Functionally dependent facility* means a facility which cannot be used for its intended purpose unless it is located or carried out in close proximity to water, such as a docking or port facility necessary for the loading and unloading of cargo or passengers, shipbuilding, ship repair, or seafood processing facilities. The term does not include long-term storage, manufacture, sales or service facilities.

*Highest adjacent grade* means the highest natural elevation of the ground surface, prior to construction, next to the proposed walls of a structure.

*Historic structure* means any structure that is:

- (1) Listed individually in the National Register of Historic Places (a listing maintained by the Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirement for individual listing on the National Register;
- (2) Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;
- (3) Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of the Interior; or
- (4) Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified by an approved state program, as determined by the Secretary of the Interior.

*Mangrove stand* means an assemblage of mangrove trees which is mostly low trees noted for a copious development of interlacing adventitious roots above the ground and which contain one or more of the following species: black mangrove (*Avicennia nitida*); red mangrove (*Rhizophora mangle*); white mangrove (*Languncularia racemosa*); and buttonwood (*Conocarpus erecta*).

*Manufactured home* means a structure, transportable in one or more sections, which is built on a permanent chassis and designed to be used with or without a permanent foundation when connected to the required utilities. The term also includes park trailers, travel trailers, and similar transportable structures placed on a site for 180 consecutive days or longer and intended to be improved property.

~~*Mean sea level* means the average height of the sea for all stages of the tide. It is used as a reference for establishing various elevations within the floodplain. For purposes of this chapter, the term is synonymous with National Geodetic Vertical Datum (NGVD).~~

*NAVD* means the North American Vertical Datum of 1988. It is national datum that is replacing NGVD for flood and ground elevations on the Flood Insurance Rate Maps.

*National Geodetic Vertical Datum (NGVD)* as corrected in 1929, means a vertical control used as a reference for establishing varying elevations within the floodplain. It was known formerly as the "Mean Sea Level Datum of 1929" (MSL).

*New construction* means structures for which the "start of construction" commenced on or after the effective date of this chapter.

*Sand dunes* means naturally occurring accumulations of sand in ridges or mounds landward of the beach.

*Start of construction* (for other than new construction or substantial improvements under the Coastal Barrier Resources Act (P.L. 97-348)), includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction or improvement was within 180 days of the permit date. The actual start means the first placement of permanent construction of a structure (including a manufactured home) on a site, such as the pouring of slabs or footings, installation of piles, 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 a 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.

*Structure* means a walled and roofed building that is principally above ground, a manufactured home or other manmade facilities or infrastructures including, but not limited to, fences, billboards, swimming pools, docks, poles, pipelines, transmission lines, tracks and advertising signs.

*Substantial damage* means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the fair market value of the structure before the damage occurred.

*Substantial improvement* means any reconstruction, rehabilitation, addition or other improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure before the "start of construction" of the improvement. This term includes structures which have incurred "substantial damage" regardless of the actual repair work performed. The term does not, however, include either:

- (1) Any project for improvement of a structure to correct existing violations of state or local health, sanitary or safety code specifications which have been identified by a local code enforcement official and which are the minimum necessary to assure safe living conditions.
- (2) Any alternation of a "historic structure" provided that the alternation will not preclude the structure's continued designation as a "historic structure"

~~Any repair, reconstruction, rehabilitation, addition, or improvement of a structure, when the actual cost of which the improvement or repair of the structure to its pre-damaged condition equals or exceeds 50 percent of the fair market value of the structure, either: before the "start of construction" of the improvement. This term includes structures which have incurred "substantial damage", regardless of the actual repair work performed.~~

- ~~(1) —~~
  - ~~a. Before the improvement or repair is started, or~~
  - ~~b. If the structure has been damaged and is being restored, before the damage occurred.~~

~~(2)(1) The total cost does not include nonstructural interior finishes including, but not limited to, finish flooring and floor coverings, base molding, nonstructural substrates, drywall, plaster, paneling, wall~~

~~covering, tapestries, window treatments, decorative masonry, paint, interior doors, tile, cabinets, moldings and millwork, decorative metal work, vanities, electrical receptacles, electrical switches, electrical fixtures, intercom, communications and sound systems, security systems, HVAC grills, decorative trims, and free standing metal fireplaces, appliances, water closets, tubs and shower enclosures, lavatories and water heaters or roof coverings, except when determining whether the structure has been substantially improved as a result of a single improvement or repair.~~

~~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 any project for improvement of a structure to correct existing violations of health, sanitary or safety code specifications which have been identified by the building official which are solely the minimum necessary to assure safe living conditions.~~

~~(2) The term does not include any alteration of a structure listed on the National Register of Historic Places or the state inventory of historic places, provided that the alteration will not preclude the structure's continued designation as a historic structure on such national register or state inventory.~~

"V" Zone means the special flood hazard area delineated on the Flood Insurance Rate Maps, inundated by the 100 year flood and supports a 3 foot wave or coastal flood with velocity hazard.

*Variance* means a grant of relief from the requirements of this chapter which permits construction in a manner otherwise prohibited by this chapter where specific enforcement would result in unnecessary hardship.

#### **Sec. 66-32. Objectives.**

The objectives of this article are:

- (1) To protect human life and health;
- (2) To minimize expenditure of public money for costly flood control projects;
- (3) To minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- (4) To minimize prolonged business interruptions;
- (5) To 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) To 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; and
- (7) To insure that potential home buyers are notified that property is in a flood area.

#### **Sec. 66-33. Lands to which this article applies.**

This article shall apply to all areas of special flood hazard within the jurisdiction of the City. The areas of special flood hazard identified by the Federal Emergency Management Agency in its flood insurance rate map (FIRM) dated ~~March 2, 1983~~ September 3, 2003, with accompanying maps and other supporting data, and any revisions or replacement thereto, are adopted by reference and declared to be a part of this article.

#### **Sec. 66-34. Establishment of development permit.**

A development permit shall be required in conformance with the provisions of this article prior to the commencement of any development activities.

**Sec. 66-35. Compliance.**

No structure or land shall hereafter be located, extended, converted, or structurally altered without full compliance with the terms of this article and other applicable regulations.

**Sec. 66-36. Abrogation and greater restrictions.**

This article is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this article and another conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

**Sec. 66-37. Interpretation.**

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

- (1) Considered as minimum requirements;
  - (2) Liberally construed in favor of the City Commission; and
  - (3) Deemed neither to limit nor repeal any other powers granted under state statutes.
- (Ord. No. 95-10, § 34-22, 9-19-95)

**Sec. 66-38. Warning and disclaimer of liability.**

- (1) The degree of flood protection required by this article is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by manmade or natural causes. This article does not imply that areas outside the areas of special flood hazard or uses permitted within such districts will be free from flooding or flood damages.
- (2) This article shall not create liability on the part of the City or by any officer or employee thereof for any flood damages that result from reliance on this article or any administrative decision lawfully made thereunder.

**Sec. 66-39. Conformance.**

All construction under this article shall conform with to all provisions of this article and all ordinances of the city and shall be built in compliance with the ~~Standard Building Code, Standard Mechanical Code, Standard Plumbing Code and National Electrical Code~~ Florida Building Code, Chapter 553 Florida Statutes, adopted in chapter 64.

Secs. 66-40--66-60. Reserved.

**DIVISION 2. ADMINISTRATION\***

**Sec. 66-61. Designation of City Manager.**

The City Manager is hereby appointed to administer and implement the provisions of this article.

**Sec. 66-62. Development permit procedures.**

Application for a development permit shall be made to the City Manager on forms furnished by him prior to any development activities, and may include, but not be limited to, the following plans in duplicate drawn to scale showing the nature, location, dimensions, and elevations of the area in question; existing or proposed structures, fill, storage or materials, drainage facilities, and the location of the foregoing. Specifically the following information is required:

- (1) *Application stage.*
  - (a) Elevation in relation to mean sea level of the proposed lowest floor (including basement) of all structures;

(b) Elevation in relation to mean sea level to which any nonresidential structure will be flood proofed;

(c) Certificate from a registered professional engineer or architect that the nonresidential flood\_proofed structure will meet the flood\_proofing criteria in subsection 66-92(2)(1)(b); and

(d) Description of the extent to which any watercourse will be altered or relocated as a result of proposed development.

(2) *Construction stage.* Provide a ~~floor~~ flood\_elevation or flood\_proofing certification after the lowest floor is completed, or in instances whether the structure is subject to the regulations applicable to coastal high hazard areas, after placement of the horizontal structural members of the lowest floor. Upon placement of the lowest floor, or flood\_proofing by whatever construction means, or upon placement of the horizontal structural members of the lowest floor, whichever is applicable, it shall be the duty of the permit holder to submit to the city manager a certification of the elevation of the lowest floor, flood\_proofed elevation, or the elevation of the lowest portion of the horizontal structural members of the lowest floor, whichever is applicable, as built, ~~in relation to mean sea level~~. The certification shall be prepared by or under the direct supervision of a registered land surveyor or professional engineer and certified by same. When flood\_proofing is utilized for a particular building, the certification shall be prepared by or under the direct supervision of a professional engineer or architect and certified by same. Any work undertaken prior to submission of the certification shall be at the permit holder's risk. The City Manager shall review the ~~floor~~ flood\_elevation survey data submitted. Deficiencies detected by such review shall be corrected by the permit holder immediately and prior to further progressive work being permitted to proceed. Failure to submit the survey or failure to make such corrections required hereby shall be cause to issue a stop-work order for the project.

### **Sec. 66-63. Duties and responsibilities of the City Manager.**

Duties of the City Manager shall include, but not be limited to:

(1) Review all development permits to assure that the permit requirements of this article have been satisfied.

(2) Advise the permittee that additional federal or state permits may be required, and if specific federal or state permit requirements are known, require that copies of such permits be provided and maintained on file with the development permit.

(3) Notify adjacent communities and the ~~appropriate state department of community affairs agency~~, prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Emergency Management Agency.

(4) Assure that maintenance is provided within the altered or relocated portion of such watercourse so that the flood-carrying capacity is not diminished.

(5) Verify and record the actual elevation (~~in relation to the mean sea level~~) of the lowest floor (including basement) of all new or substantially improved structures, in accordance with subsection (2) of this section.

(6) Verify and record the actual elevation (in relation to the mean sea level) to which the new or substantially improved structures have been flood\_proofed, in accordance with subsection 66-62(2).

(7) In coastal hazard areas, certification shall be obtained from a registered professional engineer or architect that the structure is designed to be securely anchored to adequately anchored pilings or columns in order to withstand velocity waters and hurricane wave wash.

(8) In coastal high hazard areas, the City Manager shall review plans for adequacy of breakaway walls in accordance with subsection 66-92(4)~~h~~(2)(g) and (h).

(9) When flood proofing is utilized for a particular structure, the city manager shall obtain certification from a registered professional engineer or architect, in accordance with subsection 66-92(2).

(10) Where interpretation is needed as to the exact location of boundaries of the areas of special flood hazard (for example, where there appears to be a conflict between a mapped boundary and actual field conditions) the City Manager shall make the necessary interpretation. The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in this article.

(11) When base flood elevation data has not been provided in accordance with section 66-33, then the City Manager shall obtain, review, and reasonably utilize any base flood elevation data available from a federal, state or other source, in order to administer the provisions of article II, division 3 of this chapter.

(12) All records pertaining to the provisions of this article shall be maintained in the office of the City Manager and shall be opened for public inspection.

**Sec. 66-64. Variance procedures--Generally.**

(1) The Planning and Zoning Board as established by the City Commission shall hear and decide appeals and requests for variances from the requirements of this article.

(2) The Planning and Zoning Board shall hear and decide appeals when it is alleged there is an error in any requirement, decision or determination made by the City Manager in the enforcement or administration of this article.

(3) Any person aggrieved by the decision of the Planning and Zoning Board or any taxpayer may appeal such decision to the circuit court as provided in state statutes.

(4) 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 section, except for subsections 66-65(a) and (d), and provided the proposed reconstruction, rehabilitation or restoration will not result in the structure losing its historical designation.

(5) In passing upon such applications, the Planning and Zoning Board shall consider all technical evaluations, all relevant factors, all standards specified in other sections of this article, and chapter 70, article III, division 3 of this Code and:

- (a) The danger that materials may be swept onto other lands to the injury of others;
- (b) The danger to life and property due to flooding or erosion damage;
- (c) The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
- (d) The importance of the services provided by the proposed facility to the community;
- (e) The necessity of the facility to a waterfront location, in the case of a functionally dependent facility;

- (f) The availability of alternative locations, not subject to flooding or erosion damage, for the proposed use;
- (g) The compatibility of the proposed use with existing and anticipated development;
- (h) The relationship of the proposed use to the comprehensive plan and floodplain management program for that area;
- (i) The safety of access to the property in times of flood for ordinary and emergency vehicles;
- (j) 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; and
- (k) The costs of providing governmental services during and after flood conditions including maintenance and repair of public utilities and facilities such as sewer, gas, electrical and water systems, and streets and bridges.

(6) Upon consideration of the factors listed in subsection ~~(e)~~(5) of this section, and the purposes of this article, the planning and zoning board may attach such conditions to the granting of variances as it deems necessary to further the purposes of this article.

**Sec. 66-65. Same--Findings.**

(1) Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief; and in the instance of an historical building, a determination that the variance is the minimum necessary so as not to destroy the historic character and design of the building.

(2) Variances shall only be issued upon:

(a) A showing of good and sufficient cause;

(b) A determination that failure to grant the variance would result in exceptional hardship; and

(c) A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisance, 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 specifying the difference between the base flood elevation and the elevation to which the structure is to be built and stating that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation.

(4) The City Manager shall maintain the records of all appeal actions and report any variances to the Federal Emergency Management Agency upon request.

**Sec. 66-66. Same--Transferability and expiration.**

(1) Such variance shall be freely transferable with the land and shall not be personal to the applicant as long as the use of the land remains the same.

(2) Unless otherwise provided therein, a variance shall be valid for a period of one year after the date of its issuance. If construction has not commenced pursuant thereto within such time, the variance shall become void. Lapse of a variance by the passage of time shall not preclude subsequent application for variance.

**Sec. 66-67. Same--Exclusions.**

No variance except as herein specifically permitted may be granted from the provisions of this article. The variance procedures herein provided shall be the exclusive method for obtaining variances under the provisions herein.

Secs. 66-68--66-90. Reserved.

**DIVISION 3. STANDARDS FOR FLOOD HAZARD REDUCTION**

**Sec. 66-91. General standards.**

In all areas of special flood hazard, the following provisions are required:

- (1) New construction and substantial improvements shall be anchored to prevent flotation, collapse or lateral movement of the structure;
- (2) Manufactured homes shall be prohibited;
- (3) New construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage;
- (4) New construction or substantial improvements shall be constructed by methods and practices that minimize flood damage;
- (5) Electrical, heating, ventilation, plumbing, air conditioning equipment and other service facilities shall be designated and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding;
- (6) New and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system;
- (7) New and replacement sanitary sewer systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems and discharges from the systems into floodwaters;
- (8) On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding; and
- (9) Any alteration, repair, reconstruction or improvements to a structure which is in compliance with the provisions of this article shall meet the requirements of "new construction" as contained in this article.

**Sec. 66-92. Specific standards.**

In all areas of special flood hazard where base flood elevation data have been provided, as set forth in section 66-33 or subsection 66-63(11), the following provisions are required:

(1) Coastal high hazard areas (A zones).

(a) *Residential construction.* New construction or substantial improvement of any residential structure shall have the lowest floor, including basement, elevated no lower than the base flood elevation plus 2.0 feet of freeboard. Should solid foundation perimeter walls be used to elevate a structure, openings sufficient to facilitate the unimpeded movements of floodwaters shall be provided in accordance with standards of subsection (1)(c) of this section.

1. All buildings or structures shall be securely anchored on pilings or columns.

2. All pilings and columns and the attached structures shall be anchored to resist flotation, collapse and lateral movement due to the effect of wind and water loads acting simultaneously on all building components. The anchoring and support system shall be designed with wind and water loading values which equal or exceed the 100-year mean recurrence interval (one percent annual chance flood).

3. A registered professional engineer or architect shall certify that the design, specifications and plans for construction are in compliance with the provisions contained in subsections (2)(a), (b), and (c) of this section.

4. There shall be no fill used as structural support. Noncompacted fill may be used around the perimeter of a building for landscaping/aesthetic purposes provided the fill will wash out from the storm surge, (thereby rendering the building free of obstruction) prior to generating excessive loading forces, ramping effects or wave deflection. The city manager shall approve design plans for landscaping/aesthetic fill only after the applicant has provided an analysis by an engineer, architect and/or soil scientist which demonstrates that the following factors have been fully considered:

- a. Particle composition of fill material does not have a tendency for excessive natural compaction;
- b. Volume and distribution of fill will not cause wave deflection to adjacent properties; and
- c. Slope of fill will not cause wave run-up or ramping.

(b) *Nonresidential construction.* New construction or substantial improvement of any commercial, industrial or nonresidential structure shall have the lowest floor, including basement, elevated no lower than the base flood elevation plus 2.0 feet of freeboard. Structures located in all A zones may be floodproofed in lieu of being elevated provided that all areas of the structure below the ~~required~~ base flood elevation plus 2.0 feet of freeboard are watertight with walls substantially impermeable to the passage of water, and use structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effect of buoyancy. A registered professional engineer or architect shall certify that the standards of this subsection are satisfied. Such certification shall be provided to the official as set forth in subsection 66-62(2).

(c) *Elevated buildings.* New construction or substantial improvements of elevated buildings that include fully enclosed areas formed by foundation and other exterior walls below the base flood elevation shall be designed to preclude finished living space and designed to allow for the entry and exit of floodwaters to automatically equalize hydrostatic flood forces on exterior walls.

1. Designs for complying with this requirement must either be certified by a professional engineer or architect or meet the following minimum criteria:
  - a. Provide a minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding;
  - b. The bottom of all openings shall be no higher than one foot above grade; and

- c. Openings may be equipped with screens, louvers, valves or other coverings or devices provided they permit the automatic flow of floodwaters in both directions.
- 2. Electrical, heating, ventilation, plumbing and other utility connections air conditioning equipment and other service facilities (including ductwork) are prohibited below the base flood elevation plus 2.0 feet of freeboard or made of flood-resistant materials;
- 3. Access to the enclosed area shall be the minimum necessary to allow for parking of vehicles (garage door) or limited storage of maintenance equipment used in connection with the premises (standard exterior door) or entry to the living area (stairway or elevator); and
- 4. The interior portion of such enclosed area shall not be partitioned or finished into separate rooms. All interior walls, floor and ceiling materials located below the base flood elevation plus 2.0 feet of freeboard must be unfurnished and resistant to flood damage. Carpet, paneling, drywall or other similar materials which may be damaged by flood waters are prohibited.
- 5. The total floor area of all such enclosed areas shall not exceed 300 square feet.

(2) *Coastal high hazard areas (V zones).*

Located within the areas of special flood hazard established in section 66-33 are areas designated as coastal high hazard areas. These areas have special flood hazards associated with wave wash, therefore, the following provisions shall apply:

- (a) All buildings or structures shall be elevated so that the bottom of the lowest supporting horizontal member (excluding pilings or columns) is located no lower than the base flood elevation level plus 2.0 feet of freeboard with all space below the lowest supporting member open so as not to impede the flow of water. Breakaway walls may be permitted and must be designed to wash away in the event of abnormal wave action and in accordance with subsections (2)(g) and (h) of this section.
- (b) All buildings or structures shall be securely anchored on pilings or columns.
- (c) All pilings and columns and the attached structures shall be anchored to resist flotation, collapse and lateral movement due to the effect of wind and water loads acting simultaneously on all building components. The anchoring and support system shall be designed with wind and water loading values which equal or exceed the 100-year mean recurrence interval (one percent annual chance flood).
- (d) A registered professional engineer or architect shall certify that the design, specifications and plans for construction are in compliance with the provisions contained in subsections (2)(a), (b), and (c) of this section.
- (e) There shall be no fill used as structural support. Non-compacted fill may be used around the perimeter of a building for landscaping/aesthetic purposes provided the fill will wash out from the storm surge, (thereby rendering the building free of obstruction) prior to generating excessive loading forces, ramping effects or wave deflection. The City Manager shall approve design plans for landscaping/aesthetic fill only after the applicant has provided an analysis by an

engineer, architect and/or soil scientist which demonstrates that the following factors have been fully considered:

1. Particle composition of fill material does not have a tendency for excessive natural compaction;
  2. Volume and distribution of fill will not cause wave deflection to adjacent properties; and
  3. Slope of fill will not cause wave run-up or ramping.
- (f) There shall be no alteration of sand dunes or mangrove stands which would increase potential flood damage.
- (g) Nonsupporting breakaway walls, open lattice-work or mesh screening shall be allowed below the base flood elevation plus 2.0 feet of freeboard provided they are not part of the structural support of the building and are designed so as to breakaway under abnormally high tides or wave action, without damage to the structural integrity of the building on which they are to be used and provided the following design specifications are met:
1. Design safe loading resistance of each wall shall be not less than ten nor more than 20 pounds per square foot; or
  2. If more than 20 pounds per square foot, a registered professional engineer or architect shall certify that the design wall collapse would result from a water load less than that which would occur during the base flood event, and the elevated portion of the building and supporting foundation system shall not be subject to collapse, displacement or other structural damage due to the effects of wind and water loads acting simultaneously on all building components during the base flood event. Maximum wind and water loading values to be used in this determination shall each have one percent chance of being equaled or exceeded in any given year (100-year mean recurrence interval).
- (h) If breakaway walls are utilized, such enclosed space shall not be designated to be usable for human habitation, but shall be designed to be usable only for parking of vehicles, building access or limited storage of maintenance equipment used in connection with the premises.
- (i) Prior to construction, plans for any structures that will have breakaway walls must be submitted to the city manager for approval.
- (j) Any alteration, repair, reconstruction or improvement to a structure shall not enclose the space below the lowest floor except with breakaway walls, as provided for in subsections ~~(4)~~(2)(g) and (h) of this section.
- (k) Prohibit the placement of manufactured homes (mobile homes).

**Sec. 66-93. Subdivisions.**

The building official shall review subdivision proposals and other proposed new developments to assure that:

- (1) All such proposals are consistent with the need to minimize flood damage;

(2) All public utilities and facilities such as sewer, gas, electrical, and water systems are located and constructed to minimize or eliminate flood damage;

(3) Adequate drainage is provided so as to reduce exposure to flood hazards; and

(4) All such proposals include flood elevation data.

**SECTION 2.** The City Commission does hereby certify that this Ordinance is consistent with the City's Comprehensive Plan and related elements thereof.

**SECTION 3.** In all other respects, the provisions of Chapter 66, Article II of the Land Development Regulations of the City of Treasure Island, Florida not hereby amended or modified shall remain in full force and effect.

**SECTION 4.** All ordinances or portions of ordinances in conflict with or inconsistent with this ordinance are hereby repealed to the extent of such inconsistency or conflict.

**SECTION 5.** This ordinance shall take effect immediately upon its final passage.

**FIRST READING AND PUBLIC HEARING:  
SECOND READING AND PUBLIC HEARING:  
PUBLISHED:**

\_\_\_\_\_  
Robert Minning, Mayor

**ATTEST:**

\_\_\_\_\_  
Dawn Foss, City Clerk