

**FLOOD DAMAGE PREVENTION\***

**Sec. 15½-1. Definitions.**

Unless specifically defined below, words or phrases used in this chapter shall be interpreted so as to give them the meaning they have in common usage and to give this chapter its most reasonable application.

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

*Base flood* means the flood having a one per cent chance of being equalled or exceeded in any given year.

*Coastal high hazard area* means the area subject to high velocity waters, including, but not limited to, hurricane wave wash or tsunamis. The area is designated on a FIRM as Zone V1-30.

*Development* means any man-made 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.

*Existing mobile home park or mobile home subdivision* means a parcel (or contiguous parcels) of land divided into two (2) or more mobile home lots for rent or sale for which the construction of facilities for servicing the lot on which the mobile home is to be affixed (including, at a minimum, the installation of utilities,

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\***Editor's note**—Ord. No. 78-14, adopted June 5, 1978, did not specifically amend this Code; hence its inclusion as §§ 15½-1—15½-16 was at the discretion of the editor.

**Charter references**—City planning, Ch. G; planning and zoning, Ch. J, § 171 et seq.

**Cross references**—Buildings, Ch. 9; mobile homes, Ch. 19; subdivisions, Ch. 30; zoning, App. A.

either final site grading or the pouring of concrete pads, and the construction of streets) is completed before the effective date of this chapter.

*Expansion to an existing mobile home park or mobile home subdivision* means the preparation of additional sites by the construction of facilities for servicing the lots on which the mobile homes are to be affixed (including the installation of utilities, either final site grading or pouring of concrete pads, or the construction of streets).

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

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

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

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

*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*).

*Mean sea level* means the average height of the sea for all stages of the tide.

*Mobile 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. It does not include recreational vehicles or travel trailers.

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

*New mobile home park or mobile home subdivision* means a parcel (or contiguous parcels) of land divided into two (2) or more mobile home lots for rent or sale for which the construction of facilities for servicing the lot on which the mobile home is to be affixed (including, at a minimum, the installation of utilities, either final site grading or the pouring of concrete pads, and the construction of streets) is completed 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* means the first placement of permanent construction of a structure (other than a mobile home) on a site, such as the pouring of slabs or footings or any work beyond the stage of excavation, including the relocation of a structure. Permanent construction does not 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 as part of the main structure. For a structure (other than a mobile home) without a basement or poured footings, the start of construction includes the first permanent framing or assembly of the structure or any part thereof on its piling or foundation. For mobile homes not within a mobile home park or mobile home subdivision, start of construction means the affixing of the mobile home to its permanent site. For mobile homes within the mobile home parks or mobile home subdivisions, start of construction is the date on which the construction of facilities for servicing the site on which the mobile home is to be affixed (including, at a minimum, the construction of streets, either final site grading or the pouring of concrete pads, and installation of utilities) is completed.

*Structure* means a walled and roofed building that is principally above ground, as well as a mobile home.

*Substantial improvement* means, for a structure built prior to the enactment of this chapter, any repair, reconstruction, or im-

provement of a structure, the cost of which equals or exceeds fifty (50) per cent of the market value of the structure either, (1) before the improvement or repair is started, or (2) if the structure has been damaged and is being restored, before the damage occurred. For the purposes 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 (1) 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 ensure safe living conditions, or (2) 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 which permits construction in a manner otherwise prohibited by this chapter where specific enforcement would result in unnecessary hardship. (Ord. No. 78-14, Art. I, 6-5-78)

**Sec. 15½-2. Lands to which this chapter applies.**

This chapter shall apply to all areas of special flood hazard within the jurisdiction of the City of Key West. (Ord. No. 78-14, Art. II, § A, 6-5-78)

**Sec. 15½-3. Basis for establishing the areas of special flood hazard.**

The areas of special flood hazard identified by the Federal Insurance Administration in its flood insurance rate map (FIRM), No. 120168A, dated October 29, 1976, and any revisions thereto are adopted by reference and declared to be a part of this chapter. (Ord. No. 78-14, Art. II, § B, 6-5-78)

**Sec. 15½-4. Development permit required.**

A development permit shall be required in conformance with the provisions of this chapter. (Ord. No. 78-14, Art. II, § C, 6-5-78)

**Sec. 15½-5. Compliance required.**

No structure or land shall hereafter be located, extended, converted, or structurally altered without full compliance with the terms of this chapter and other applicable regulations and ordinances. (Ord. No. 78-14, Art. II, § D, 6-5-78)

**Sec. 15½-6. 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 conflict or overlap, whichever imposes the more stringent restrictions shall prevail. (Ord. No. 78-14, Art. II, § E, 6-5-78)

**Sec. 15½-7. 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 governing body; and, (3) deemed neither to limit nor repeal any other powers granted under state statutes. (Ord. No. 78-14, Art. II, § F, 6-5-78)

**Sec. 15½-8. 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. Larger floods can and will occur on rare occasions. Flood heights may be increased by man-made or natural causes. This chapter does not imply that land outside the areas of special flood hazard 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 of Key West, or by any officer or employee thereof for any flood damages that result from reliance on this chapter or any administrative decision lawfully made thereunder. (Ord. No. 78-14, Art. II, § G, 6-5-78)

**Sec. 15½-9. Penalties for violation.**

Violation of the provisions of this chapter or failure to comply with any of its requirements, including violation of conditions

and safeguards established in connection with grants of variance or special exceptions, shall constitute a misdemeanor. Any person who violates this chapter or fails to comply with any of its requirements shall, upon conviction thereof, be fined not more than five hundred dollars (\$500.00) or imprisoned for not more than sixty (60) days, or both, and in addition shall pay all costs and expenses involved in the case. Each day such violation continues shall be considered a separate offense. Nothing herein contained shall prevent the City of Key West from taking such other lawful action as is necessary to prevent or remedy any violation. (Ord. No. 78-14, Art. II, § H, 6-5-78)

**Sec. 15½-10. Designation of building official as administrator.**

The building official is hereby appointed to administer and implement the provisions of this chapter. (Ord. No. 78-14, Art. II, § A, 6-5-78)

**Sec. 15½-11. Duties and responsibilities of the building official.**

Duties of the building official shall include, but not be limited to:

- (a) Review of all development permits to ensure that the permit requirements of this chapter have been satisfied.
- (b) Advising permittee that additional federal or state permits may be required, and if specific federal or state permits are known, requiring that copies of such permits be provided and maintained on file with the development permit.
- (c) Verifying and recording the actual elevation (in relation to mean sea level) of the lowest floor (including basement) of all new or substantially improved structures.
- (d) Verifying and recording the actual elevation (in relation to mean sea level) to which the new or substantially improved structures have been floodproofed.
- (e) In coastal high hazard areas certification shall be obtained from a registered professional engineer or architect that

the structure is securely anchored to adequately anchored pilings or columns in order to withstand velocity waters and hurricane wave wash.

- (f) When floodproofing is utilized for a particular structure, the building official shall obtain certification from a registered professional engineer or architect.
- (g) Where interpretation is needed as to the exact location of the 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 building official 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 chapter.
- (h) All records pertaining to the provisions of this chapter shall be maintained in the office of the building official and shall be open for public inspection. (Ord. No. 78-14, Art. III, § A, 6-5-78)

**Sec. 15½-12. Permit procedures.**

Application for a development permit shall be made to the building official on forms furnished by him 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 of materials; drainage facilities, and the location of the foregoing. Specifically, the following information is required:

- (a) Elevation in relation to mean sea level of the lowest floor (including basement) of all structures.
- (b) Elevation in relation to mean sea level to which any non-residential structure has been floodproofed.
- (c) Provide a certificate from a registered professional engineer or architect that the nonresidential floodproofed structure meets the floodproofing criteria in subsection 15½-15(b). (Ord. No. 78-14, Art. III, § C, 6-5-78)

**Sec. 15½-13. Variance procedures.**

(a) The board of adjustment as established by Ordinance No. 69-29 [included herein as Appendix A, Zoning] shall hear and decide appeals and requests for variances from the requirements of this chapter.

(b) The board of adjustment shall hear and decide appeals 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 or persons, or any taxpayer, department, board or bureau of the city aggrieved by any decision of the board of adjustment may, within thirty (30) days after the filing of such decision in the office of the city clerk, but not thereafter, apply to the courts for relief in the manner provided by the laws of the State of Florida.

(d) 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.

(e) In passing upon such application, the board of adjustment shall consider all technical evaluations, all relevant factors, standards specified in other sections of this chapter, and:

- (1) The danger that materials may be swept onto other lands to the injury of others;
- (2) The danger to life and property due to flooding or erosion damage;
- (3) The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
- (4) The importance of the services provided by the proposed facility to the community;
- (5) The necessity to the facility of a waterfront location, where applicable;
- (6) The availability of alternative locations, not subject to flooding or erosion damage, for the proposed use;

- (7) The compatibility of the proposed use with existing and anticipated development;
- (8) The relationship of the proposed use to the comprehensive plan and floodplain management program for that area;
- (9) The safety of access to the property in time of flood for ordinary and emergency vehicles;
- (10) 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,
- (11) 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.

Generally, variances may be issued for new construction and substantial improvements to be erected on a lot one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, providing items (1) through (11) above have been fully considered. As the lot size increases beyond the one-half acre, the technical justification required for issuing the variance increases.

(f) Upon consideration of the factors listed above and the purposes of this chapter, the board of adjustment may attach such conditions to the granting of variances as it deems necessary to further the purposes of this chapter.

(g) Conditions for 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) a showing of 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 law 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 building official shall maintain the records of all appeal actions and report any variances to the Federal Insurance Administration upon request. (Ord. No. 78-14, Art. III, § D, 6-5-78)

**Sec. 15½-14. General standards for flood hazard reduction.**

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

- (a) All new construction and substantial improvements shall be anchored to prevent flotation, collapse or lateral movement of the structure.
- (b) All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.
- (c) All new construction or substantial improvements shall be constructed by methods and practices that minimize flood damage.
- (d) All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system.
- (e) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into the systems and discharges from the systems into floodwaters.
- (f) On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.
- (g) Any alteration, repair, reconstruction, or improvements to a structure on which the start of construction was begun

after the effective date of this chapter, shall meet the requirements of new construction as contained in this chapter. (Ord. No. 78-14, Art. IV, § A, 6-5-78)

**Sec. 15½-15. Specific standards for flood hazard reduction.**

In all areas of special flood hazard where base flood elevation data has been provided as set forth in section 15½-3, the following provisions are required:

- (a) *Residential construction.* New construction or substantial improvement of any residential structure shall have the lowest floor, including basement, elevated to or above base flood elevation.
- (b) *Nonresidential construction.* New construction or substantial improvement of any commercial, industrial or other nonresidential structure shall either have the lowest floor, including basement, elevated to the level of the base flood elevation or, together with attendant utility and sanitary facilities, be floodproofed 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 certify that the standards of this subsection are satisfied. Such certification shall be provided to the official as set forth in subsection 15½-12(c).
- (c) *Mobile homes.*
  - (1) No mobile home shall be placed in a coastal high hazard area, except in an existing mobile home park or existing mobile home subdivision.
  - (2) All mobile homes shall be anchored to resist flotation, collapse, or lateral movement by providing over-the-top and frame ties to ground anchors. Specific requirements shall be that:
    - a. Over-the-top ties be provided at each end of the mobile home, with one additional tie per side at an intermediate location on mobile homes of less

than fifty (50) feet and one additional tie per side for mobile homes of fifty (50) feet or more.

- b. Frame ties be provided at each corner of the home with four (4) additional ties per side at intermediate points for mobile homes less than fifty (50) feet long and one additional tie for mobile homes of fifty (50) feet or longer;
  - c. All components of the anchoring system be capable of carrying a force of four thousand eight hundred (4,800) pounds; and,
  - d. Any additions to the mobile home be similarly anchored.
- (3) For new mobile home parks and subdivisions; for expansions to existing mobile home parks and subdivisions; for existing mobile home parks and subdivisions where the repair, reconstruction or improvement of the streets, utilities and pads equals or exceeds fifty (50) per cent of value of the streets, utilities and pads before the repair, reconstruction or improvement has commenced; and, for mobile homes not placed in a mobile home park or subdivision the following are required:
- a. Stands or lots elevated on compacted fill or on pilings so that the lowest floor of the mobile home will be at or above the base flood level;
  - b. Provision for adequate surface drainage and access for a hauler; and,
  - c. In the instance of elevation on pilings; (1) lots large enough to permit steps; (2) piling foundations placed in stable soil no more than ten (10) feet apart; and, (3) reinforcement provided for pilings more than six (6) feet above the ground level.
- (d) *Coastal high hazard areas.* Located within the areas of special flood hazard established in subsection 15½-3 are areas designated as coastal high hazard areas. These areas have special flood hazards associated with high velocity waters from tidal surge and hurricane wave wash, therefore, the following provisions shall apply:

- (1) All buildings or structures shall be located landward of the reach of the mean high tide.
- (2) All buildings or structures shall be elevated so that the lowest supporting member is located no lower than the base flood elevation level, with all space below the lowest supporting member open so as not to impede the flow of water.
- (3) All buildings or structures shall be securely anchored on pilings or columns.
- (4) Pilings or columns used as structural support shall be designed and anchored so as to withstand all applied loads of the base flood flow.
- (5) Compliance with provisions contained in subsections 15½-15(d)(2), (3) and (4) shall be certified to by a registered professional engineer or architect.
- (6) There shall be no fill used as structural support.
- (7) There shall be no alteration of sand dunes or mangrove stands which would increase potential flood damage.
- (8) The placement of mobile homes, except in an existing mobile home park or existing mobile home subdivision is prohibited. (Ord. No. 78-14, Art. IV, § B, 6-5-78)

**Sec. 15½-16. Standards for subdivision proposals.**

(a) All subdivision proposals shall be consistent with the need to minimize flood damage.

(b) All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage.

(c) All subdivision proposals shall have adequate drainage provided to reduce exposure to flood hazards.

(d) Base flood elevation data shall be provided for subdivision proposals and other proposed development which is greater than the lesser of fifty (50) lots or five (5) acres. (Ord. No. 78-14, Art. IV, § C, 6-5-78)