

CHAPTER 14. FLOOD PROTECTION

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CHAPTER 14. FLOOD PROTECTION

ARTICLE 1. GENERAL

Sec. 14.1.1. INTENT

14.1.1.1. It is intended to establish on the Official Zoning map an overlay zoning district designated as Flood Hazard (FH) Districts in areas subject to moderate to severe periodic inundation, and within such areas to regulate and restrict uses in such a manner as to protect life and property, prevent or minimize damage, and reduce public costs for flood control and rescue and relief efforts occasioned by unwise or occupancy of such areas.

These districts are further intended to protect and preserve natural open spaces, park lands, swamp lands, water sheds, recharge areas, lakes and their connecting canals. To these ends, permitted and permissible uses are basically limited to conservation, agriculture, low intensity recreation and with certain limitations, other uses not contrary to the character of these districts.

In order to minimize flood hazards, it is intended to distinguish between floodways, defined as channels through which water passes at substantial depths, or velocities, and bordering areas needed for structural controls, and flood plains where inundation may occur but where depth and velocities are generally low during floods. It is further intended that regulations shall relate to design floods, defined as floods, likely to occur under probable conditions at 100 year frequencies.

These overlay district boundaries are delineated on the zoning map in the form of an outlined pattern and in certain cases by an actual district boundary line. The more restrictive FH regulations and requirements shall take precedence over those of the underlying zoning district.

Sec. 14.1.2. DETERMINATION OF FLOOD PLAIN AREAS.

Flood plain areas for Auburndale shall be established in accordance with the following criteria:

14.1.2.1. Floodways and flood plains of all lakes, streams or ponds in the City shall be considered to extend from the normal bank of said waterways to the upper limit of a water elevation line for a 100 year frequency flood. This upper limit of water elevation line, when not determined by an agency of the City or other public agency shall be determined by the petitioner for a development permit (building permit, site plan approval, rezoning or subdivision approval or special exception).

The petitioner for such development permit, having land within the overlay (FH) district, may be required to provide boundary surveys, topographic maps, plans, hydrological and geological data, soil data and such other information necessary for factual analysis of the subject property to demonstrate the relationship of the property and proposed development to the floodways of flood plains.

The petitioner shall be required to obtain all applicable federal and state permits and submit such permits as a part of any development order.

Failure of the petitioner to justify the development permit request or to demonstrate the ability to develop within the stated intent of this district shall be adequate ground for denial of the development permit.

- 14.1.2.2. If it is determined by the Planning Commission at the time of hearing of the petition request that an error has been made in establishing and locating the Flood Hazard District boundary, the Planning Commission shall recommend corrections accordingly to the City Commission for zoning map amendments according to the provisions of Chapter 21 of the LDR.

Sec. 14.1.3. USE OF AVAILABLE FLOOD DATA.

The administrative official shall:

- 14.1.3.1. Obtain the elevation (in relation to mean sea level) of the lowest habitable floor (including basement) of all new or substantially improved structures, and whether or not such structures contain a basement.
- 14.1.3.2. Obtain, if the structure has been floodproofed, the elevation (in relation to mean sea level) to which the structure was floodproofed.
- 14.1.3.3. Maintain a record of such information for public review.
- 14.1.3.4. **RESIDENTIAL CONSTRUCTION.** New construction or substantial improvement of any residential building (or manufactured home) shall have the lowest floor, including basement elevated no lower than the base flood elevation. Should solid foundation perimeter walls be used to elevate a structure, openings sufficient to facilitate the unimpeded movements of flood waters shall be provided in accordance with the following:
 - 14.1.3.4.1. Provide openings below flood level in accordance with the specifications of Section 60.3(c)(5) of the NFIP regulations for elevated buildings.

14.1.3.5. **NON-RESIDENTIAL CONSTRUCTION.** New construction or substantial improvement of any commercial, industrial, or non-residential building (or manufactured home) shall have the lowest floor, including basement, elevated no lower than the level of the base flood elevation. Buildings located in all A-zones may be flood proofed in lieu of being elevated provided that all areas of the building below the required elevation are water tight 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 state that the design and methods of construction are in accordance with accepted standards of practice for meeting the provisions of this paragraph.

14.1.3.6. **THE ADMINISTRATIVE OFFICIAL SHALL FURTHER:**

14.1.3.6.1. Notify adjacent cities and the Department of Community Affairs prior to any alteration or relocation of a watercourse.

14.1.3.6.2. Assure that maintenance is provided within the altered or relocated portion of said watercourse so that the flood-carrying capacity is not diminished.

14.1.3.6.3. Require new and replacement water and sewer systems to be designed to minimize infiltration.

14.1.3.6.4. Require on-site waste disposal systems to be designed to avoid impairment during flooding.

Sec. 14.1.4. GENERAL GUIDES AND STANDARDS FOR FLOOD HAZARD DISTRICTS.

In determinations concerning uses and structures to be permitted in FH districts, and conditions and safeguards to be applied, the Administrative Official and Planning Commission shall be guided by the below stated requirements and considerations.

14.1.4.1. **FLOODWAYS.** Located within areas of special flood hazard, are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of flood waters which carry debris, potential projectiles and has erosion potential, the following provisions shall apply:

14.1.4.1.1. Prohibit encroachments, including fill, new construction, substantial improvements and other developments unless certification (with supporting technical data) by a registered professional engineer

is provided demonstrating that encroachments shall not result in any increase in flood levels during occurrence of the base flood discharge;

14.1.4.1.2. If the above paragraph 14.1.4.1.1. is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of these LDR.

14.1.4.1.3. Prohibit the placement of manufactured homes (mobile homes), except in an existing manufactured homes (mobile homes) park or subdivision. A replacement manufactured home may be placed on a lot in an existing manufactured home park or subdivision provided the anchoring standards, the elevation standards, and the encroachment standards of these LDR are met.

14.1.4.2. FLOOD PLAIN PROTECTION. Uses and structures permitted in particular flood plains shall be limited to those least likely to be damaged by the kind and amount of flooding anticipated. No area known to be susceptible to frequent and dangerous flash floods shall be permitted to be used as a place of assembly for substantial numbers of persons during periods when such floods are likely to occur. Any structures permitted in flood plains shall be so located, elevated, constructed and anchored so as to minimize potential hazards and damage from probable flooding, resist flotation, and offer minimum obstruction to flood flow. No use shall be permitted which increases amounts of potentially damaging materials (including those likely to be injurious to health) which might be carried downstream in floods.

14.1.4.3. FLOOD RESISTANT MATERIALS AND UTILITY EQUIPMENT. All electrical, heating, ventilation, plumbing, and air-conditioning equipment and other service facilities shall be designed of flood resistant materials and/or located so as to prevent water from entering or accumulating within components during conditions of flooding.

14.1.4.4. MANUFACTURED HOUSING. Manufactured housing shall be anchored in accordance with the specifications of Section 60.3 (b) 8 of the NFIP regulations.

14.1.4.5. SUBDIVISIONS. All subdivisions shall be reviewed to assure that:

14.1.4.5.1. Such proposals minimize flood damage;

14.1.4.5.2. Public utilities and facilities construction minimize damage; and

14.1.4.5.3. Adequate drainage is provided.

- 14.1.4.5.4. Require BFE data for all developments greater than 50 lots or 5 acres.

Sec. 14.1.5. WARNING AND DISCLAIMER OF LIABILITY.

The degree of flood protection required by this subsection is considered reasonable for regulatory purposes and is based on the best available information and methods of study. Larger floods may occur. This subsection does not imply that areas outside the flood hazard district boundaries or land uses permitted within such districts will be free from flooding or flood damages. This subsection shall not create liability on the part of the City or any officer or employee thereof for any flood damages that result from reliance on this subsection or any administrative decision lawfully made thereunder.

Sec. 14.1.6 PERMITTED PRINCIPAL USES AND STRUCTURES.

- 14.1.6.1. Agricultural and horticultural uses, but not to include keeping the raising of livestock and poultry.
- 14.1.6.2. Temporary roadside stands for sales of products grown on the premises with sale limited only to such products.
- 14.1.6.3. Private camps (including day camps).
- 14.1.6.4. Noncommercial beaches, docks, boat launching facilities, boathouses and the like. See Sec. 5.2.18. of the LDR for specific requirements.
- 14.1.6.5. Fish hatcheries and refuges.
- 14.1.6.6. Water wells.
- 14.1.6.7. Private fish camps.
- 14.1.6.8. Publicly owned and operated parks, picnic areas, campgrounds, recreational areas, and uses appropriate to the intended character of the district or necessary to the preservation and maintenance of permitted uses and structures.
- 14.1.6.9. Existing single-family detached residential structures.
- 14.1.6.10. Existing railroad right-of-way and switching yards and accessory residential structures for railroad personnel.

Sec. 14.1.7. PERMITTED ACCESSORY USES AND STRUCTURES.

Uses and structures which are customarily accessory and clearly incidental and subordinate to permitted or permissible uses and structures; provided, however, that no permanent residential structures shall be permitted in the district except for owners or employees necessarily required to reside on the premises. Where such residential structures are permitted or necessary, not more than one such accessory single-family detached dwelling unit shall be permitted for each 5 acres of lot area except as provided otherwise and that all such dwelling units shall have a floor elevation of not less than 3 feet above design flood levels.

Sec. 14.1.8. PROHIBITED USES AND STRUCTURES.

- 14.1.8.1. Residential and institutional uses, except as provided under FH, "Accessory Uses and Structures."
- 14.1.8.2. Commercial uses, except as specifically permitted or permissible as special exceptions.
- 14.1.8.3. Industrial Uses.
- 14.1.8.4. Off-site advertising signs and billboards.
- 14.1.8.5. All uses not specifically listed as permitted or permissible principal uses.

Sec. 14.1.9. SPECIAL EXCEPTIONS.

- 14.1.9.1. Commercial fishing camps.
- 14.1.9.2. Marinas without major repairs or dry storage of pleasure craft.
- 14.1.9.3. Commercial campground or recreational areas.
- 14.1.9.4. Water reservoirs and control structures; drainage wells.
- 14.1.9.5. Private camps sponsored by nonprofit organizations.
- 14.1.9.6. Riding academy and the like.
- 14.1.9.7. Major grading, filling, excavating and dredging, (see the below standards in 14.1.10.2.) for determinations.
- 14.1.9.8. Kennels.

Sec. 14.1.10. STANDARDS FOR SPECIAL EXCEPTIONS.

In addition to the general guides and standards as stated in Chapter 20 of the LDR, the following requirements shall apply to special exceptions:

14.1.10.1 FLOOD AND EROSION CONTROL WORKS; STRUCTURES IN NAVIGABLE WATERS. Before erection, construction or alteration of any flood or erosion control work or structure in navigable waters, the petitioner shall submit to the Board of Adjustment a plan (a) showing the location of the contemplated structures in conjunction with adjoining lands, waters, and channels, and (b) detailing the specifications and cost of the proposed work. All plans and specifications except for residential piers, bulkheads and seawalls shall be prepared by a professional licensed to practice this type design work in Florida.

14.1.10.1.1. No works shall be permitted which will damage the subject or adjoining properties. All works shall be designed to provide a degree of protection consistent with the intended uses of the property.

14.1.10.1.2. Fill and other materials for protective works shall be protected against erosion by such methods as riprap, vegetative cover or bulkheading.

14.1.10.1.3. The petitioner shall obtain all necessary State and Federal approval prior to final approval and beginning construction of the proposed work.

14.1.10.2. GRADING, FILLING, EXCAVATING AND DREDGING. A special exception shall be required from the Board of Adjustment before grading, filling, excavating or dredging of any land which will result in an exposed surface or more than 43,560 square feet or the fill, excavation or dredging of more than 5,000 cubic yards or of work, sand or soil material. The Board may permit the proposed activity only if it will not seriously disturb, damage or cause upland erosion or interfere with natural drainage. The Board may require a plan for the proposed work and topographic, engineering or geologic or other studies based upon the plan to determine the nature, strength and distribution of existing and proposed soils, and the adequacy of design criteria. The Board may grant a special exception subject to conditions pertaining to final slope and grade; period of ground cover removal, bulkheading, drainage facilities, reconstruction of natural storm protective features and other materials. The Board may require the developer to post a bond to assure that proposed protective measures are carried out as planned.

Sec. 14.1.11. MINIMUM LOT REQUIREMENTS.

14.1.11.1. RESIDENTIAL STRUCTURE AS ACCESSORY TO PRINCIPAL USES:

Minimum parcel width: 165 feet.

Minimum parcel area: 5 acres; provided a single family detached residential structure may be erected as an accessory use on a parcel of lesser size where such parcel is classified under Chapter 193.461, Florida Statutes, as an agricultural use.

14.1.11.2. OTHER PERMITTED OR PERMISSIBLE USES OR STRUCTURES. None except as otherwise specified or as necessary to meet all other requirements herein set out.

Sec. 14.1.12. MAXIMUM LOT COVERAGE BY ALL STRUCTURES.

Unrestricted

Sec. 14.1.13. MINIMUM YARD REQUIREMENTS.

All structures, permitted and permissible, except where a greater distance for yard or setback is required for the particular use involved.

Front: 50 feet.

Side and rear: 35 feet.

Sec. 14.1.14. MAXIMUM HEIGHT OF STRUCTURES.

No portion intended for human occupancy shall exceed: 35 feet.

Sec. 14.1.15. MINIMUM OFF-STREET PARKING REQUIREMENTS.

(See also Chapter 11 of the LDR. Unrestricted provided:

14.1.15.1. No off-street parking or loading shall at any time be on public rights-of-way.

14.1.15.2. For uses permitted in OUA, off-street parking and loading requirements shall be as for OUA.

Sec. 14.1.16. DEFINITIONS.

The definitions contained in Chapter 4 of the LDR shall apply to the provisions of this Chapter and in addition the definitions below shall have application to the provisions of this Chapter.

- 14.1.16.1. AREA OF SHALLOW FLOODING. A designated AO or VO Zone on a community's Flood Insurance Rate Map (FIRM) with base flood depths from one to three feet where a clearly defined channel does not exist, where the path of flooding is unpredictable and indeterminate, and where velocity flow may be evident.
- 14.1.16.2. AREA OF SPECIAL FLOOD HAZARD. The land in the flood plain within a community subject to a one percent or greater chance of flooding in any given year.
- 14.1.16.3. BASE FLOOD. The flood having a one percent chance of being equaled or exceeded in any given year.
- 14.1.16.4. BASEMENT. That portion of a building having its floor subgrade (below ground level) on all sides.
- 14.1.16.5. BREAKAWAY WALL. 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.
- 14.1.16.6. DEVELOPMENT. Any man-made change to improve or unimproved real estate, including, but not limited to, buildings or other structures, mining, dredging, filling, grading, paving, excavating, drilling operations, or permanent storage of materials.
- 14.1.16.7. ELEVATED BUILDING. A non-basement building built to have the lowest floor elevated above the ground level by means of fill, solid foundation perimeter walls, pilings, columns (post and piers), shear walls, or breakaway walls.
- 14.1.16.8. FLOOD OR FLOODING. A general and temporary condition of partial or complete inundation of normally dry land areas from:
 - 14.1.16.8.1. The overflow of inland or tidal waters;
 - 14.1.16.8.2. The unusual and rapid accumulation or run-off of surface waters from any source.
- 14.1.16.9. FLOOD HAZARD BOUNDARY MAP (FHBM). 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.

- 14.1.16.10. **INSURANCE STUDY.** 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.
- 14.1.16.11. **FLOODWAY.** 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 one foot.
- 14.1.16.12. **FLOOR.** 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.
- 14.1.16.13. **FUNCTIONALLY DEPENDENT FACILITY.** 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, shipbuildings, ship repair, or seafood processing facilities. The term does not include long-term storage, manufacture, sales, or service facilities.
- 14.1.16.14. **HIGHEST ADJACENT GRADE.** The highest natural elevation of the ground surface, prior to construction, next to the proposed walls of a structure.
- 14.1.16.15. **MANUFACTURED HOME.** For purposes of this Chapter and for flood plain management purposes, means a building, 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 dates or longer and intended to be improved property.
- 14.1.16.16. **MEAN SEA LEVEL.** The average height of the sea for all stages of the tide. It is used as a reference for establishing various elevations within flood plain. For purposes of this ordinance, the term is synonymous with National Geodetic Vertical Datum (NGVD).
- 14.1.16.17. **NATIONAL GEODETIC VERTICAL DATUM (NGVD).** As corrected in 1929 is a vertical control used as a reference for establishing varying elevations within the flood plain.

14.1.16.18. START OF CONSTRUCTION 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. For this subsection permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkaways; 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.

14.1.16.19. SUBSTANTIAL IMPROVEMENT. Any repair, reconstruction, or improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure either, (a) before the improvement of repair is started, or (b) 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 assure safe living conditions or (2) any alternation of a structure listed on the National Register of Historic Places or a State Inventory of Historic Places.