

**STATE OF FLORIDA**

**FLOOD DAMAGE PREVENTION ORDINANCE**

**For Non-Coastal Communities with Regulatory Floodways**

**As revised January 29, 2009**

## MODEL FLOOD DAMAGE PREVENTION ORDINANCE

The following is provided to assist you in developing an ordinance that will comply with the participating criteria of the National Flood Insurance Program (NFIP) and the floodplain management related requirements of State of Florida. It is imperative that the community's attorney(s) consider necessary additions and include all required information and delegations to the model; ensure the ordinance's consistency with the governmental structure of the community; and ensure that the ordinance meets all requirements of law that apply to the community. It is not intended that this model, if adopted, will serve all of a community's needs as related to floodplain management, land use, or zoning. Any community may adopt standards that are more restrictive than the NFIP participating standards. This model ordinance contains the Federal regulations governing community participation in the NFIP and local regulation of development in Special Flood Hazard Areas (SFHA). Additionally, it will provide some **suggested** enhancements for consideration in **bold blue** font in flower brackets.

This model ordinance includes sections for development in Approximate A-Zones (streams without established Base Flood Elevations and floodways), standards for streams with established base flood elevation without regulatory floodways, standards for AO- and AH-Zones, standards for subdivision proposals, standards for manufactured homes and recreational vehicles, standards for coastal high hazard areas (V-Zones), variance procedures, and definitions of appropriate terms pertaining to these areas. If your community does not have one or more of these components designated on the Flood Insurance Rate Map (FIRM), it is not necessary to adopt the standards for those sections and corresponding definitions in the ordinance.

A community's ordinance may be subject to a determination of compliance by FEMA and/or State of Florida staff. It is recommended that all communities coordinate with their community attorneys and appropriate agencies to ensure the ordinance's adequacy.

Technical Bulletins provide additional guidance concerning the floodplain management criteria of the NFIP, which are contained in Title 44 of the U.S. Code of Federal Regulations at Sections 59.1 (definitions), 60.3 (floodplain management criteria) and 60.6 (variances). These bulletins do not create regulation; rather, they provide specific guidance for complying with the requirements of the NFIP regulations contained in this model flood damage prevention ordinance. Users of the Technical Bulletins who need additional guidance concerning NFIP regulatory requirements should contact the State of Florida – State Assistance Office for the National Flood Insurance Program at (850) 413-9959. Copies of Technical Bulletins can be obtained by calling FEMA Publications Service Center at 1-800-480-2520. The Technical Bulletins are also available at the FEMA web site at <http://www.fema.gov/plan/prevent/floodplain/techbul.shtm>.

Floodplain Management Bulletins provide additional guidance concerning the Elevation Certificate. This bulletin is available at <http://www.fema.gov/pdf/fima/fema467-6-10-04.pdf>. The bulletin regarding Use of Flood Insurance Study (FIS) Data as Best Available Data is available at [http://www.dnr.ne.gov/floodplain/flood/Desk\\_Reference/Tab-11-Tech\\_Bulletins/FMB%201-98-Use%20Of%20Flood%20Insurance%20Study%20Data.pdf](http://www.dnr.ne.gov/floodplain/flood/Desk_Reference/Tab-11-Tech_Bulletins/FMB%201-98-Use%20Of%20Flood%20Insurance%20Study%20Data.pdf).

# **ARTICLE 1. STATUTORY AUTHORIZATION, FINDINGS OF FACT, PURPOSE, AND OBJECTIVES**

## **SECTION A. STATUTORY AUTHORIZATION**

The Legislature of the State of Florida has authorized and delegated in [Chapter 125 \[counties\]](#) and [Chapter 166 \[municipalities\]](#), [Florida Statutes](#) *{Note: include only one}*, the responsibility of local government units to adopt regulations designed to promote the public health, safety, and general welfare of its citizenry. Therefore, the *{governing body}* of *{county or municipality}* does hereby adopt the following floodplain management regulations.

## **SECTION B. FINDINGS OF FACT**

- (1) The flood hazard areas of *{county or municipality}* are subject to periodic inundation, which results in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety and general welfare.
- (2) These flood losses are caused by the cumulative effect of obstructions in floodplains causing increases in flood heights and velocities, and by the occupancy in flood hazard areas by uses vulnerable to floods or hazardous to other lands which are inadequately elevated, flood-proofed, or otherwise unprotected from flood damages.

## **SECTION C. STATEMENT OF PURPOSE**

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

- (1) Restrict or prohibit uses which are dangerous to life, health, safety and property due to water or erosion hazards, which result in damaging increases in erosion or in flood heights and velocities;
- (2) Require that uses vulnerable to floods including facilities which serve such uses be protected against flood damage throughout their intended life span;
- (3) Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of flood waters;
- (4) Control filling, grading, dredging and other development which may increase erosion or flood damage; and
- (5) Prevent or regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands.

## **SECTION D. OBJECTIVES**

The objectives of this ordinance are to:

- (1) Protect human life, health and to eliminate or minimize property damage;
- (2) Minimize expenditure of public money for costly flood control projects;
- (3) Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- (4) Minimize prolonged business interruptions;

- (5) Minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, roadways, and bridges and culverts located in floodplains;
- (6) Maintain a stable tax base by providing for the sound use and development of flood prone areas in such a manner as to minimize flood blight areas; and
- (7) Ensure that potential homebuyers are notified that property is in a flood hazard area.

## ARTICLE 2. DEFINITIONS

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

**Accessory structure** (Appurtenant structure) means a structure that is located on the same parcel of property as the principal structure and the use of which is incidental to the use of the principal structure. Accessory structures should constitute a minimal investment, may not be used for human habitation, and be designed to have minimal flood damage potential. Examples of accessory structures are detached garages, carports, storage sheds, pole barns, and hay sheds.

**Appeal** means a request for a review of the Floodplain Administrator's interpretation of any provision of this ordinance or a request for a variance.

**Area of shallow flooding** means a designated AO or AH Zone on the 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. Such flooding is characterized by ponding or sheet flow.

**Area of special flood hazard** is the land in the floodplain within a community subject to a one- percent or greater chance of flooding in any given year. This term is synonymous with the phrase "special flood hazard area."

**Base flood** means the flood having a one percent chance of being equaled or exceeded in any given year (also called the "100-year flood" and the "regulatory flood"). Base flood is the term used throughout this ordinance.

**Base Flood Elevation** means the water-surface elevation associated with the base flood.

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

**Building** – see **Structure**.

**Datum** A reference surface used to ensure that all elevation records are properly related. The current national datum is the National Geodetic Vertical Datum (NGVD) of 1929, which is expressed in relation to mean sea level, or the North American Vertical Datum (NAVD) of 1988.

**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, excavating, drilling operations, or storage of materials or equipment.

**Elevated building** means a non-basement building built to have the lowest floor elevated above the ground level by foundation walls, posts, piers, columns, pilings, or shear walls.

**Encroachment** means the advance or infringement of uses, plant growth, fill, excavation, buildings, permanent structures or development into a floodplain, which may impede or alter the flow capacity of a floodplain.

**Existing Construction** means, for the purposes of floodplain management, structures for which "the start of construction" commenced before **{the date of the initial adoption of the floodplain management regulations by**

**the community}**. Existing construction, means for the purposes of determining rates structures for which the “start of construction” commenced before **{the effective date of the first FIRM or before January 1, 1975, for FIRMs effective before that date}**. This term may also be referred to as “existing structures”.

**Existing manufactured home park or subdivision** means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed before **{the effective date of the floodplain management regulations adopted by a community}**.

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

**Flood or flooding** means:

- (a) A general and temporary condition of partial or complete inundation of normally dry land areas from:
  - (1) The overflow of inland or tidal waters.
  - (2) The unusual and rapid accumulation or runoff of surface waters from any source.
  - (3) Mudslides (i.e., mudflows) which are proximately caused by flooding as defined in paragraph (a) (2) of this definition and are akin to a river of liquid and flowing mud on the surface of normally dry land areas, as when earth is carried by a current of water and deposited along the path of the current.
- (b) The collapse or subsidence of land along a shore of a lake or other body of water as the result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually high water level in a natural body of water, accompanied by a severe storm or by an unanticipated force of nature, such as a flash flood or an abnormal tidal surge or by some similarly unusual and unforeseeable event which results in flooding as defined in paragraph (a) (1) of this definition.

**Flood Boundary and Floodway Map (FBFM)** means the official map of the community on which the Federal Emergency Management Agency (FEMA) has delineated the areas of special flood hazard and regulatory floodways.

**Flood Hazard Boundary Map (FHBM)** means an official map of the community, issued by FEMA, where the boundaries of the areas of special flood hazard have been identified as only Approximate Zone A.

**Flood Insurance Rate Map (FIRM)** means an official map of the community, issued by FEMA, which delineated both the areas of special flood hazard and the risk premium zones applicable to the community.

**Flood Insurance Study (FIS)** means the official hydrology and hydraulics report provided by FEMA. The study contains an examination, evaluation, and determination of flood hazards, and, if appropriate, corresponding water surface elevations, or an examination, evaluation, and determination of mudslide (i.e., mudflow) and other flood-related erosion hazards. The study may also contain flood profiles, as well as the FIRM, FHBM (where applicable), and other related data and information.

**Floodplain** means any land area susceptible to being inundated by water from any source (see definition of “flooding”).

**Floodplain management** means the operation of an overall program of corrective and preventive measures for reducing flood damage and preserving and enhancing, where possible, natural resources in the floodplain, including but not limited to emergency preparedness plans, flood control works, floodplain management regulations, and open space plans.

**Floodplain Administrator** is the individual appointed to administer and enforce the floodplain management regulations of the community.

**Floodplain management regulations** means this ordinance and other zoning ordinances, subdivision regulations, building codes, health regulations, special purpose ordinances (such as floodplain ordinance, grading ordinance, and erosion control ordinance), and other applications of police power which control development in flood-prone areas. This term describes Federal, State of Florida, or local regulations in any combination thereof, which provide standards for preventing and reducing flood loss and damage.

**Floodproofing** means any combination of structural and non-structural additions, changes, or adjustments to structures, which reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures and their contents.

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

**Floodway fringe** means that area of the one-percent (base or 100-year) floodplain on either side of the regulatory floodway.

**Freeboard** means the additional height, usually expressed as a factor of safety in feet, above a flood level for purposes of floodplain management. Freeboard tends to compensate for many unknown factors, such as wave action, blockage of bridge or culvert openings, and hydrological effect of urbanization of the watershed, which could contribute to flood heights greater than the heights calculated for a selected frequency flood and floodway conditions.

**Free of Obstruction** means any type of lower area enclosure or other construction element will not obstruct the flow of velocity water and wave action beneath the lowest horizontal structural member of the lowest floor of an elevated building during a base flood event. This requirement applies to the structures in velocity zones (V-Zones).

**Functionally dependent use** means a use that 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 or ship repair. The term does not include long-term storage, manufacture, sales, or service facilities.

**Hardship** as related to variances from this ordinance means the exceptional difficulty associated with the land that would result from a failure to grant the requested variance. The community requires that the variance is exceptional, unusual, and peculiar to the property involved. Mere economic or financial hardship alone is not exceptional. Inconvenience, aesthetic considerations, physical handicaps, personal preferences, or the disapproval of one's neighbors likewise cannot, as a rule, qualify as an exceptional hardship. All of these problems can be resolved through other means without granting a variance, even if the alternative is more expensive, or requires the property owner to build elsewhere or put the parcel to a different use than originally intended.

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

**Historic Structure** means any structure that is:

- a) 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 requirements for individual listing on the National Register:
- b) Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic or a district preliminarily determined by the Secretary to qualify as a registered historic district:

- c) Individually listed on the Florida inventory of historic places, which has been approved by the Secretary of the Interior; or
- d) Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either:
  - 1. By the approved Florida program as determined by the Secretary of the Interior, or
  - 2. Directly by the Secretary of the Interior.

**Lowest adjacent grade** means the lowest elevation, after the completion of construction, of the ground, sidewalk, patio, deck support, or basement entryway immediately next to the structure.

**Lowest floor** means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, used solely for parking of vehicles, building access, or storage, in an area other than a basement, is not considered a building's lowest floor, provided that such enclosure is not built so as to render the structure in violation of the applicable nonelevation design standards of this ordinance.

**Manufactured home** 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 days or longer and intended to be improved property.

**Manufactured home park or subdivision** means a parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.

**Market value** means the building value, which is the property value excluding the land value and that of the detached accessory structures and other improvements on site (as agreed to between a willing buyer and seller) as established by what the local real estate market will bear. Market value can be established by an independent certified appraisal (other than a limited or curbside appraisal, or one based on income approach), Actual Cash Value (replacement cost depreciated for age and quality of construction of building), or adjusted tax-assessed values.

**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 ordinance, the term is synonymous with National Geodetic Vertical Datum (NGVD) of 1929, or North American Vertical Datum (NAVD) of 1988.

**National Geodetic Vertical Datum (NGVD) of 1929** means a vertical control used as a reference for establishing varying elevations within the floodplain.

**New Construction** means, for floodplain management purposes, any structure for which the "start of construction" commenced on or after **{the effective date of the initial floodplain management code, ordinance, or standard based upon specific technical base flood elevation data that establishes the area of special flood hazard}** – (include only one date). The term also includes any subsequent improvements to such structures. For flood insurance rates, structures for which the start of construction commenced on or after **{the effective date of the date of an initial FIRM or after December 31, 1974, whichever is later}** – (include only one date), and includes any subsequent improvements to such structures.

**New manufactured home park or subdivision** means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed on or after the effective date of the first floodplain management code, ordinance or standard.

**North American Vertical Datum (NAVD) of 1988** means a vertical control used as a reference for establishing varying elevations within the floodplain.

**Principally above ground** means that at least 51 percent of the actual cash value of the structure is above ground.

**Program deficiency** means a defect in the community's floodplain management regulations or administrative procedures that impairs effective implementation of those floodplain management regulations or of the standards required by the National Flood Insurance Program.

**Public safety and nuisance** means anything which is injurious to safety or health of the entire community or a neighborhood, or any considerable number of persons, or unlawfully obstructs the free passage or use, in the customary manner, of any navigable lake, or river, bay, stream, canal, or basin.

**Reasonably safe from flooding** means base flood waters will not inundate the land or damage structures to be removed from the SFHA and that any subsurface waters related to the base flood will not damage existing or proposed buildings.

**Recreational vehicle** means a vehicle that is:

- a) Built on a single chassis;
- b) 400 square feet or less when measured at the largest horizontal projection;
- c) Designed to be self-propelled or permanently towable by a light duty truck; and
- d) Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

**Regulatory floodway** means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height.

**Remedy a deficiency or violation** means to bring the regulation, procedure, structure or other development into compliance with State of Florida, Federal, or local floodplain management regulations; or if this is not possible, to reduce the impacts of its noncompliance. Ways the impacts may be reduced include protecting the structure or other affected development from flood damages, implementing the enforcement provisions of this ordinance or otherwise deterring future similar violations, or reducing Federal financial exposure with regard to the structure or other development.

**(Optional) Repetitive loss** means flood related damage sustained by a structure on two separate occasions during a 10-year period for which the cost of repairs at the time of each such flood event, on the average, equals or exceeds 25 percent of the market value of the structure before the damage occurred. **{Note: Inclusion of this definition allows policyholders to avail ICC portion of the flood claim under the repetitive loss declaration by the community in addition to one time substantial flood damage declaration by the community. However, if adopted, the community will need to track the flood damages over the 10-year periods.}**

**Riverine** means relating to, formed by, or resembling a river (including tributaries), stream, brook, etc.

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

**Shallow flooding** – see **area of shallow flooding**.

**Special flood hazard area** – see **area of special flood hazard**.

**Start of construction** means, for other than new construction and 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 building (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 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 building. For substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

**Storm cellar** means a place below grade used to accommodate occupants of the structure and emergency supplies as a means of temporary shelter against severe tornadoes or similar windstorm activity.

**Structure** means, for floodplain management purposes, a walled and roofed building, including gas or liquid storage tank that is principally above ground, as well as a manufactured home.

**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 market value of the structure before the damage occurred. This term also includes “repetitive loss” structures as defined herein.

**Substantial improvement** means any reconstruction, rehabilitation, addition, or other improvement of a structure, the cumulative 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 that have incurred “substantial damage” regardless of the actual repair work performed. This term does not, however, include any repair or improvement of a structure to correct existing violations of State of Florida or local health, sanitary, or safety code specifications, which have been identified by the local code enforcement official prior to the application for permit for improvement, and which are the minimum necessary to assure safe living conditions. This term does not include any alteration of a historic structure, provided that the alteration will not preclude the structure’s continued designation as a historic structure.

**Substantially improved existing manufactured home parks or subdivisions** is where the repair, reconstruction, rehabilitation or improvement of the streets, utilities and pads equals or exceeds 50 percent of the value of the streets, utilities and pads before the repair, reconstruction or improvement commenced.

**Variance** is a grant of relief from the requirements of this ordinance.

**Violation** means the failure of a structure or other development to be fully compliant with the requirements of this ordinance. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in this ordinance is presumed to be in violation until such time as that documentation is provided.

**Watercourse** means a lake, river, creek, stream, wash, channel or other topographic feature on or over which waters flow at least periodically. Watercourse includes specifically designated areas in which substantial flood damage may occur.

**Water surface elevation** means the height, in relation to the National Geodetic Vertical Datum (NGVD) of 1929 or the North American Vertical Datum (NAVD) of 1988, of floods of various magnitudes and frequencies in the floodplains of coastal or riverine areas.

## **ARTICLE 3. GENERAL PROVISIONS**

### **SECTION A. LANDS TO WHICH THIS ORDINANCE APPLIES**

This ordinance shall apply to all areas of special flood hazard within the jurisdiction of the *{governing body}* of *{county or municipality}*.

**SECTION B. BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD HAZARD**

The areas of special flood hazard identified by the Federal Emergency Management Agency in the Flood Insurance Study (FIS) for the *{participating community}*, dated *{applicable date(s)}*, with the accompanying maps and other supporting data, and any subsequent revisions thereto, are adopted by reference and declared to be a part of this ordinance. The Flood Insurance Study and Flood Insurance Rate Map are on file at {\_\_\_\_\_}.

**SECTION C. DESIGNATION OF FLOODPLAIN ADMINISTRATOR**

The *{governing body}* of *{county or municipality}* hereby appoints the *{community official's title}* to administer and implement the provisions of this ordinance and is herein referred to as the Floodplain Administrator.

**SECTION D. ESTABLISHMENT OF DEVELOPMENT PERMIT**

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

**SECTION E. COMPLIANCE**

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

**SECTION F. ABROGATION AND GREATER RESTRICTIONS**

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

**SECTION G. INTERPRETATION**

In the interpretation and application of this ordinance 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 of Florida statutes.

**SECTION H. WARNING AND DISCLAIMER OF LIABILITY**

The degree of flood protection required by this ordinance is considered reasonable for regulatory purposes and is based on scientific and engineering consideration. Larger floods can and will occur on rare occasions. Flood heights may be increased by man-made or natural causes. This ordinance 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 ordinance shall not create liability on the part of *{governing body}* of *{county or municipality}* or by any officer or employee thereof for any flood damages that result from reliance on this ordinance or any administrative decision lawfully made thereunder.

**SECTION I. PENALTIES FOR VIOLATION**

Violation of the provisions of this ordinance 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 be punishable for a non-criminal violation. Any person who violates this ordinance or fails to comply with any of its requirements shall, upon adjudication therefore, be fined not more than \$500, 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 Floodplain Administrator from taking such other lawful actions as are necessary to prevent or remedy any violation.

## **ARTICLE 4. ADMINISTRATION**

### **SECTION A. PERMIT PROCEDURES**

Application for a Development Permit shall be made to the Floodplain Administrator on forms furnished by him or her 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 and proposed structures, earthen fill, storage of materials or equipment, 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 buildings;
  - b) Elevation in relation to mean sea level to which any non-residential building will be flood-proofed;
  - c) Certificate from a registered professional engineer or architect that the non-residential flood-proofed building will meet the flood-proofing criteria in Article 4, Section A (2) and Article 5, Section B (2);
  - d) Description of the extent to which any watercourse will be altered or relocated as a result of proposed development; and
  - (e) Elevation in relation to mean sea level of the bottom of the lowest horizontal structural member of the lowest floor and provide a certification from a registered engineer or architect indicating that they have developed and/or reviewed the structural designs, specifications and plans of the construction and certified that are in accordance with accepted standards of practice in Coastal High Hazard Areas.

- (2) Construction Stage:

Upon placement of the lowest floor, or flood-proofing by whatever construction means, or bottom of the lowest horizontal structural member it shall be the duty of the permit holder to submit to the Floodplain Administrator a certification of the NGVD or NAVD elevation of the lowest floor or flood-proofed elevation, or bottom of the lowest horizontal structural member of the lowest floor as built, in relation to mean sea level. Said 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 said 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 Floodplain Administrator shall review the lowest floor and flood-proofing elevation survey data submitted. The permit holder immediately and prior to further progressive work being permitted to proceed shall correct violations detected by such review. Failure to submit the survey or failure to make said corrections required hereby shall be cause to issue a stop-work order for the project.

### **SECTION B. DUTIES AND RESPONSIBILITIES OF THE FLOODPLAIN ADMINISTRATOR**

Duties of the Administrator shall include, but are not be limited to:

- (1) Review permits to assure sites are reasonably safe from flooding;

- (2) Review all development permits to assure that the permit requirements of this ordinance have been satisfied;
- (3) Require copies of additional Federal, State of Florida, or local permits, especially as they relate to Chapters 161.053; 320.8249; 320.8359; 373.036; 380.05; 381.0065; and 553, Part IV, Florida Statutes, be submitted along with the development permit application and maintain such permits on file with the development permit;
- (4) Notify adjacent communities, the Florida Department of Community Affairs – Division of Emergency Management – NFIP Coordinating Office, **{the Applicable Water Management District}**, the Federal Emergency Management Agency, and other Federal and/or State of Florida agencies with statutory or regulatory authority prior to any alteration or relocation of a watercourse;
- (5) Assure that the flood-carrying capacity within the altered or relocated portion of any watercourse is maintained;
- (6) Verify and record the actual elevation (in relation to mean sea level) of the lowest floor (A-Zones) or bottom of the lowest horizontal structural member of the lowest floor (V-Zones) of all new and substantially improved buildings, in accordance with Article 5, Section B (1) and (2) and Section E (2), respectively;
- (7) Verify and record the actual elevation (in relation to mean sea level) to which the new and substantially improved buildings have been flood-proofed, in accordance with Article 5, Section B (2);
- (8) Review certified plans and specifications for compliance. When flood-proofing is utilized for a particular building, certification shall be obtained from a registered engineer or architect certifying that all areas of the building, together with attendant utilities and sanitary facilities, 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 effects of buoyancy in compliance with Article 5, Section B (2) of this ordinance. In Coastal High Hazard Areas, certification shall be obtained from a registered professional engineer or architect that the building is designed and securely anchored to pilings or columns in order to withstand velocity waters and hurricane wave wash. Additionally in Coastal High Hazard Areas, if the area below the lowest horizontal structural member of the lowest floor is enclosed, it may be done so with open wood lattice and insect screening or with non-supporting breakaway walls that meet the standards of Article 5, Section E (6) of this ordinance;
- (9) Interpret the exact location of boundaries of the areas of special flood hazard. When there appears to be a conflict between a mapped boundary and actual field conditions, the Floodplain Administrator 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;
- (10) When base flood elevation data and floodway data have not been provided in accordance with Article 3, Section B, the Floodplain Administrator shall obtain, review and reasonably utilize any base flood elevation and floodway data available from a Federal, State of Florida, or any other source, in order to administer the provisions of Article 5;
- (11) Coordinate all change requests to the FIS, FIRM and FBFM with the requester, State of Florida, and FEMA, and
- (12) Where Base Flood Elevation is utilized, obtain and maintain records of lowest floor and floodproofing elevations for new construction and substantial improvements in accordance with Article 5, Sections B (1) and (2), respectively.

## ARTICLE 5. PROVISIONS FOR FLOOD HAZARD REDUCTION

### SECTION A. GENERAL STANDARDS

In all areas of special flood hazard, all development sites including new construction and substantial improvements shall be reasonably safe from flooding, and meet the following provisions:

- (1) New construction and substantial improvements shall be designed or modified and adequately anchored to prevent flotation, collapse, and lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy;
- (2) Manufactured homes shall be anchored to prevent flotation, collapse, and lateral movement. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. This standard shall be in addition to and consistent with applicable State of Florida requirements for resisting wind forces;
- (3) New construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage;
- (4) New construction and 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, including duct work, shall be designed 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 flood waters into the systems;
- (7) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters;
- (8) On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding;
- (9) Any alteration, repair, reconstruction or improvements to a building that is in compliance with the provisions of this ordinance shall meet the requirements of “new construction” as contained in this ordinance;
- (10) Any alteration, repair, reconstruction or improvements to a building that is not in compliance with the provisions of this ordinance, shall be undertaken only if said non-conformity is not furthered, extended, or replaced;
- (11) All applicable additional Federal, State of Florida, and local permits shall be obtained and submitted to the Floodplain Administrator along with the application for development permit. Copies of such permits shall be maintained on file with the development permit. State of Florida permits may include, but not be limited to, the following:
  - (a) **{Applicable Florida Water Management District(s)}**: in accordance with Chapter 373.036 Florida Statutes, Section (2) (a) – Flood Protection and Floodplain Management;
  - (b) Department of Community Affairs: in accordance with Chapter 380.05 F.S. Areas of Critical State Concern, and Chapter 553, Part IV F.S., Florida Building Code;
  - (c) Department of Health: in accordance with Chapter 381.0065 F.S. Onsite Sewage Treatment and Disposal Systems; and

- (12) Standards for Subdivision Proposals and other new Proposed Development (including manufactured homes):
  - (a) Such proposals shall be consistent with the need to minimize flood damage;
  - (b) Such shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize or eliminate flood damage; and
  - (c) Such proposals shall have adequate drainage provided to reduce exposure to flood hazards.
- (13) **When proposed new construction and substantial improvements are partially located in an area of special flood hazard, the entire structure shall meet the standards for new construction.**
- (14) **When proposed new construction and substantial improvements are located in multiple flood hazard risk zones or in a flood hazard risk zone with multiple base flood elevations, the entire structure shall meet the standards for the most hazardous flood hazard risk zone and the highest base flood elevation.**

**SECTION B. SPECIFIC STANDARDS.**

In all A-Zones where base flood elevation data have been provided (Zones AE, A1–30, A (with base flood elevation), and AH), as set forth in Article 3, Section B, the following provisions, in addition to those set forth in Article 5, Section A, shall apply:

- (1) *Residential Construction.* All new construction and substantial improvement of any residential building (including manufactured home) shall have the lowest floor, including basement, elevated to no lower than **{one foot above}** the base flood elevation. Should solid foundation perimeter walls be used to elevate a structure, there must be a minimum of two openings on different sides of each enclosed area sufficient to facilitate automatic equalization of flood hydrostatic forces in accordance with standards of Article 5, Section B (3).
- (2) *Non-Residential Construction.* All new construction and substantial improvement of any commercial, industrial, or non-residential building (including manufactured home) shall have the lowest floor, including basement, elevated to no lower than **{one foot above}** the base flood elevation. All buildings located in A-Zones may be flood-proofed, in lieu of being elevated, provided that all areas of the building components, together with attendant utilities and sanitary facilities, below the base flood elevation **{plus one foot}** 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 effects of buoyancy. A registered professional engineer or architect shall certify that the standards of this subsection are satisfied using the FEMA Floodproofing Certificate. Such certification along with the corresponding engineering data, and the operational and maintenance plans shall be provided to the Floodplain Administrator.
- (3) *Enclosures below the Lowest Floor.* New construction and substantial improvements that include fully enclosed areas formed by foundation and other exterior walls below the lowest floor 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.
  - (a) Designs for complying with this requirement must either be certified by a professional engineer or architect or meet or exceed the following minimum criteria:
    - (i) Provide a minimum of two openings **{on different sides of each enclosed area}** having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding;

- (ii) The bottom of all openings shall be no higher than one foot above adjacent interior grade (which must be equal to or higher in elevation than the adjacent exterior grade); and
  - (iii) Openings may be equipped with screens, louvers, valves, or other coverings or devices provided they provide the required net area of the openings and permit the automatic flow of floodwaters in both directions.
- (b) Fully enclosed areas below the lowest floor shall solely be used for parking of vehicles, storage, and building access. Access to the enclosed area shall be minimum necessary to allow for parking of vehicles (garage door), limited storage of maintenance equipment used in connection with the premises (standard exterior door), or entry to the living area (stairway or elevator); and
  - (c) The interior portion of such enclosed area shall not be finished or partitioned into separate rooms.
- (4) Standards for Manufactured Homes and Recreational Vehicles
- (a) All manufactured homes that are placed, or substantially improved within Zones A1-30, AH, and AE, on sites (i) outside of an existing manufactured home park or subdivision, (ii) in a new manufactured home park or subdivision, (iii) in an expansion to an existing manufactured home park or subdivision, or (iv) in an existing manufactured home park or subdivision on which a manufactured home has incurred “substantial damage” as the result of a flood, the lowest floor be elevated on a permanent foundation to no lower than **{one foot above}** the base flood elevation and be securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.
  - (b) All manufactured homes to be placed or substantially improved in an existing manufactured home park or subdivision that are not subject to the provisions of paragraph 4 (a) of this Section, must be elevated so that either:
    - (i) The lowest floor of the manufactured home is elevated to no lower than one foot above the base flood elevation, or
    - (ii) The manufactured home chassis is supported by reinforced piers or other foundation elements of at least an equivalent strength that are no less than 36 inches **{48 inches if one foot of freeboard adopted}** in height above the grade and securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.
  - (c) **{OPTIONAL}** Placement of manufactured homes is prohibited within the regulatory floodway, except in an existing manufactured home 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 of Article 5, Section A (2), the elevation standards of Article 5, Section B (1) and (2), and the encroachment standard of Article 5, Section B (7) (a), are met.
  - (d) All recreational vehicles must either:
    - (i) Be on the site for fewer than 180 consecutive days,
    - (ii) Be fully licensed and ready for highway use (a recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices and has no permanently attached additions), or
    - (iii) Meet all the requirements for new construction, including anchoring and elevation standards in accordance with Article 5, Section B (4) (a) and (b).

- (5) Adequate drainage paths around structures shall be provided on slopes to guide water away from structures within Zone AH.
- (6) Standards for waterways with established Base Flood Elevations, but without Regulatory Floodways

Located within the areas of special flood hazard established in Article 3, Section B, where streams exist for which base flood elevation data has been provided by the Federal Emergency Management Agency without the delineation of the regulatory floodway (Zones AE and A1-30), the following provisions, in addition to those set forth in Article 5, Section B (1) through (5), shall apply:

- (a) Until a regulatory floodway is designated, no new construction, substantial improvements, or other development including fill shall be permitted within the areas of special flood hazard, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development will not increase the water surface elevation of the base flood more than one foot at any point within the community.
- (b) Development activities which increase the water surface elevation of the base flood by more than one foot may be allowed, provided that the developer or applicant first applies – with the community’s endorsement – for a conditional FIRM revision, and receives the approval of the Federal Emergency Management Agency (FEMA).

- (7) Standards for waterways with established Base Flood Elevations and Floodways.

Located within areas of special flood hazard established in Article 3, Section B, are areas designated as floodways. Since the floodway is an extremely hazardous area due to the high velocity of flood waters which carry debris, potential projectiles and have significant erosion potential, the following provisions, in addition to those set forth in Article 5, Section B (1) through (5), shall apply:

- (a) Prohibit encroachments, including fill, new construction, substantial improvements and other developments within the regulatory floodway unless certification (with supporting technical data) by a registered professional engineer is provided through hydrologic and hydraulic analyses performed in accordance with standard engineering practice demonstrating that encroachments would not result in any increase in flood levels during occurrence of the base flood discharge.
- (b) **{OPTIONAL}** Placement of manufactured homes is prohibited within the regulatory floodway, except in an existing manufactured home 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 of Article 5, Section A (2), the elevation standards of Article 5, Section B (1) and (2), and the encroachment standard of Article 5, Section B (7) (a), are met.
- (c) Development activities including new construction and substantial improvements within the regulatory floodway that increase the base flood elevation may be allowed, provided that the developer or applicant first applies – with the community’s endorsement – for a conditional FIRM revision, and receives the approval of FEMA.
- (d) When fill is proposed, in accordance with the permit issued by the Florida Department of Health, within the regulatory floodway, the development permit shall be issued only upon demonstration by appropriate engineering analyses that the proposed fill will not increase the water surface elevation of the base flood in accordance with Article 5, Section B (7) (a).

**SECTION C. SPECIFIC STANDARDS FOR A-ZONES WITHOUT BASE FLOOD ELEVATIONS AND REGULATORY FLOODWAYS.**

Located within the areas of special flood hazard established in Article 3, Section B, where there exist A Zones for which no base flood elevation data and regulatory floodway have been provided or designated by the Federal Emergency Management Agency, the following provisions shall apply:

- (1) Require standards of Article 5, Section A.
- (2) Require that all new subdivision proposals and other proposed developments (including proposals for manufactured home parks and subdivisions) greater than 50 lots or 5 acres, whichever is the lesser, include within such proposals base flood elevation data. Standards set forth in Article 5, Section B shall apply.
- (3) The Floodplain Administrator shall obtain, review, and reasonably utilize any base flood elevation and floodway data available from a Federal, State of Florida, or any other source, in order to administer the provisions of this ordinance. When such data is utilized, provisions of Article 5, Section B shall apply. The Floodplain Administrator shall:
  - a) Obtain the elevation (in relation to the mean sea level) of the lowest floor (including the basement) of all new and substantially improved structures,
  - b) Obtain, if the structure has been floodproofed in accordance with the requirements of Article 5, Section B (2), the elevation in relation to the mean sea level to which the structure has been floodproofed, and
  - c) Maintain a record of all such information.
- (4) Notify, in riverine situations, adjacent communities, the Florida Department of Community Affairs – NFIP Coordinating Office, and the **{applicable Florida Water Management District}** prior to any alteration or relocation of a watercourse, and submit copies of such notifications to FEMA.
- (5) Assure that the flood carrying capacity within the altered or relocated portion of any watercourse is maintained.
- (6) Manufactured homes shall be installed using methods and practices that minimize flood damage. They must be elevated and anchored to prevent flotation, collapse, and lateral movement. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. This requirement is in addition to applicable State of Florida and local anchoring requirements for resisting wind forces.
- (7) When the data is not available from any source, in accordance with standard set forth in Article 5, Section C (2) of this Section, the lowest floor of the structure shall be elevated to no lower than **{three feet}** above the highest adjacent grade. Standards set forth in Article 5, Section B shall apply.

#### **SECTION D. STANDARDS FOR AO-ZONES**

Located within the areas of special flood hazard established in Article 3, Section B, are areas designated as shallow flooding areas. These areas have flood hazards associated with base flood depths of one to three feet, where a clearly defined channel does not exist and the path of flooding is unpredictable and indeterminate; therefore, the following provisions, in addition to Article 5, Section A, apply:

- (1) All new construction and substantial improvements of residential structures in all AO Zones shall have the lowest floor, including basement, elevated above the highest adjacent grade at least as high as the depth number specified in feet on the Flood Insurance Rate Map **{plus one foot (if one-foot freeboard is adopted)}**. If no flood depth number is specified, the lowest floor, including basement, shall be elevated to no less than two feet **{three feet if one foot of freeboard is adopted}** above the highest adjacent grade.
- (2) All new construction and substantial improvements of non-residential structures shall:
  - (a) Have the lowest floor, including basement, elevated above the highest adjacent grade at least as high as the depth number specified in feet on the Flood Insurance Rate Map. If no flood depth number is specified, the lowest floor, including basement, shall be elevated to at least two feet **{three feet if one foot of freeboard is adopted}** above the highest adjacent grade, or

- (b) Together with attendant utility and sanitary facilities be completely floodproofed to **{no less than one foot above}** that level to meet the floodproofing standard specified in Article 5, Section D (2) (a).
- (3) Adequate drainage paths around structures shall be provided on slopes to guide water away from structures.
- (4) Fully enclosed areas below the lowest floor that are subject to flooding shall meet the non-elevation design requirements of Article 5, Section B.

## **ARTICLE 6. VARIANCE PROCEDURES.**

### **SECTION A. DESIGNATION OF VARIANCE AND APPEALS BOARD.**

The *{appointed board}* as established by the *{governing body}* of *{county or municipality}* shall hear and decide appeals and requests for variances from the requirements of this ordinance.

### **SECTION B. DUTIES OF VARIANCE AND APPEALS BOARD.**

The board shall hear and decide appeals when it is alleged an error in any requirement, decision, or determination is made by the Floodplain Management Administrator in the enforcement or administration of this ordinance. Any person aggrieved by the decision of the board may appeal such decision to the Circuit Court.

### **SECTION C. VARIANCE PROCEDURES.**

In acting upon such applications, the *{appointed board}* shall consider all technical evaluations, all relevant factors, standards specified in other sections of this ordinance, and:

- (1) The danger that materials may be swept onto other lands to the injury of others;
- (2) The danger of 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 for the proposed use which are not subject to flooding or erosion damage;
- (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 times of flood for ordinary and emergency vehicles;
- (10) The expected heights, velocity, duration, rate of rise, and sediment of transport of the flood waters 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.

**SECTION D. CONDITIONS FOR VARIANCES.**

- (1) Variances shall only be issued when there is:
  - 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 expense, create nuisance, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances.
- (2) Variances shall only be issued upon a determination that the variance is the minimum necessary deviation from the requirements of this ordinance.
- (3) **{OPTIONAL}** Variances shall not be granted after-the-fact.
- (4) The Floodplain Administrator shall maintain the records of all variance actions, including justification for their issuance or denial, and report such variances in the community’s NFIP Biennial Report or upon request to FEMA and the State of Florida, Department of Community Affairs, NFIP Coordinating Office.

**SECTION E. VARIANCE NOTIFICATION.**

Any applicant to whom a variance is granted shall be given written notice over the signature of a community official that:

- (1) The issuance of a variance to construct a structure below the base flood elevation will result in increased premium rates for flood insurance up to amounts as high as \$25 for \$100 of insurance coverage, and
- (2) Such construction below the base flood level increases risks to life and property.

A copy of the notice shall be recorded by the Floodplain Administrator in the Office of the Clerk of Court and shall be recorded in a manner so that it appears in the chain of title of the affected parcel of land.

**SECTION F. HISTORIC STRUCTURES.**

Variances may be issued for the repair or rehabilitation of “historic” structures – meeting the definition in this ordinance – upon a determination that the proposed repair or rehabilitation will not preclude the structure’s continued designation as a “historic” structure.

**SECTION G. STRUCTURES IN REGULATORY FLOODWAY.**

Variances shall not be issued within any designated floodway if any impact in flood conditions or increase in flood levels during the base flood discharge would result.

**ARTICLE 7. SEVERABILITY.**

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

**ORDINANCE ADOPTED:** {\_\_\_\_\_}.

**BY:** {\_\_\_\_\_}.

**ATTESTED BY:** {\_\_\_\_\_}.