

NASSAU COUNTY

FLOOD PLAIN

ORDINANCE 98-01

Revision Date January 12, 1998

NASSAU COUNTY

PUBLIC WORKS DEPARTMENT

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ORDINANCE NO. 98- 1

AN ORDINANCE AMENDING ORDINANCE NO. 84-13, AS AMENDED, KNOWN AS THE NASSAU COUNTY FLOOD PLAIN ORDINANCE; SPECIFICALLY AMENDING SECTION 3.11, ELEVATED BUILDINGS; SECTION 3.23, MANUFACTURED HOMES; SECTION 3.27, NEW MANUFACTURED HOMES PARK OR MOBILE HOME SUBDIVISION; SECTION 3.28, RECREATIONAL VEHICLE; SECTION 3.29, SAND DUNES; SECTION 3.30, SPECIAL HAZARD AREA; SECTION 3.31, START OF CONSTRUCTION; SECTION 3.32, STRUCTURE; SECTION 3.33, SUBSTANTIAL DAMAGE; SECTION 3.34, SUBSTANTIAL IMPROVEMENT; SECTION 3.35, VARIANCE; SECTION 3.36, VIOLATION; SECTION 4.02, BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD HAZARD; SECTION 5.01, DESIGNATION OF LOCAL ADMINISTRATOR; SECTION 5.03, DUTIES AND RESPONSIBILITIES OF THE LOCAL ADMINISTRATOR; SECTION 6.01, GENERAL STANDARDS; SECTION 6.02, SPECIFIC STANDARDS; SECTION 6.03, STANDARDS FOR UNNUMBERED "A" ZONES AND STREAMS FOR WHICH FLOODWAYS HAVE NOT BEEN ESTABLISHED; SECTION 6.04, STANDARDS FOR SUBDIVISION PROPOSALS; SECTION 6.05 STANDARDS FOR AREAS OF SHALLOW FLOODING (AO ZONES); SECTION 6.06, STANDARDS FOR SUBDIVISION PROPOSALS; PROVIDING AN AFFECTIVE DATE.

WHEREAS The flood hazard areas of Nassau County are subject to periodic inundation which results in loss of life, 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. These flood losses are caused by the cumulative effect of obstructions in flood plains causing increases in flood losses are caused by the cumulative effect of obstructions in flood plains causing increases in flood heights and velocities, and by the occupancy of flood hazard areas by uses vulnerable to floods or hazardous to other lands which are inadequately elevated, flood-proofed, or otherwise unprotected for flood damages.

ARTICLE I: SHORT TITLE

This Ordinance shall be known and may be cited as the "NASSAU COUNTY FLOOD PLAIN ORDINANCE".

ARTICLE II: LEGAL STATUS

Section 2.01 Authority

This Ordinance, together with any and all future amendments thereto, is adopted under the provisions and terms granted by *Chapters 125, 163, and 166, Florida Statutes*.

Section 2.02 Purpose and Policy

It is the purpose of this Ordinance to promote the public health, safety and general welfare and to 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 health, safety and property due to water or erosion hazards, or which results in damaging increases in erosion or in flood heights or velocities;
2. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
3. Control the alteration of natural flood plains, 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 flood waters or which may increase flood hazards to other lands.

Section 2.03 Validity

If any section, part of a section, paragraph, sentence, clause, phrase, or word of this Ordinance is, for any reason, held or declared to be unconstitutional, inoperative, void or invalid by any court having jurisdiction, such holding or invalidity shall not affect the validity of any other provision of this Ordinance.

ARTICLE III: 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.

Section 3.01 Addition (to an existing building)

Means any walled and roofed expansion to the perimeter of a building in which the addition is connected by a common load-bearing wall other than a fire wall. Any walled and roofed addition that is connected by a fire wall or is separated by independent perimeter load-bearing walls is new construction.

Section 3.02 Appeal

Means a request for a review of the Local Administration's interpretation of any provision of this Ordinance or a request for a variance.

Section 3.03 Area of Shallow Flooding

Means 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 a path of flooding is unpredictable and indeterminate, and where velocity flow may be evident.

Section 3.04 Area of Special Flood Hazard

Is the land in the flood plain within a community subject to a one percent or greater chance of flooding in any given year.

Section 3.05 Base Flood

Means the flood having a one percent chance of being equaled or exceeded in any given year.

Section 3.06 Basement

Means that portion of a building between floor and ceiling which may be partly below and partly above grade.

Section 3.07 Breakaway Wall

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

Section 3.08 Building

Means any structure built for support, shelter, or enclosure for any occupancy or storage.

Section 3.09 Coastal High Hazard Area

Means the area subject to high velocity waters caused by, but not limited to, hurricane wave wash or tsunamis. The area is designated on a FIRM as Zone VI-30.

Section 3.10 Development

Means any man-made change to improve or unimprove real estate, including, but not limited to, buildings, or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations.

Section 3.11 Elevated Building

Means 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~~ adequately anchored as to not impair the structural integrity of the building during a flood. Elevated building also includes a building elevated by fill and a solid foundation or by perimeter walls with sufficient openings to facilitate the unimpeded movement of flood waters.

Section 3.12 "Flood" or "Flooding"

Means a general and temporary condition of partial or complete inundation of normally dry land areas from:

- the overflow of inland or tidal waters;
- the unusual and rapid accumulation of runoff of surface waters from any source.

Section 3.13 Flood Hazard Boundary Map (FHBM)

Means an official map of a community, issued by the Federal Emergency Management Agency, where the boundaries of the areas of special flood hazard have been defined as a zone A.

Section 3.14 Flood Insurance Rate Map (FIRM)

Means an official map of a community, on which the Federal Emergency Management Agency has delineated both the areas of special flood hazard and the risk premium zones applicable to the community.

Section 3.15 Flood Insurance Study

Is 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.

Section 3.16 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 one foot.

Section 3.17 Floor

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

Section 3.18 Functionally Dependent Facility

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

Section 3.19 Highest Adjacent Grade

Means the highest natural elevation of the ground surface, prior to construction, next to the proposed walls of a surface.

Section 3.20 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) as meeting the requirements for individual listing on the National Register;
- b. Certified or preliminary determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminary determined by the Secretary to qualify as a registered historic district;
- c. Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of the Interior;
or

- d. Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified by an approved state program as determined by the Secretary of the Interior in states without approved programs.

Section 3.21 Lowest Floor

Means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usable solely for parking of vehicles, building access or storage in an area other than a basement area 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 non-elevation design requirements of sub-section 6.03.

Section 3.22 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 (*Cornocarpus Erecta*).

Section 3.23 Manufactured Homes

Means a closed structure, building assembly, or system of subassemblies, which may include structural, electrical, plumbing, heating, ventilating, or other service systems manufactured in manufacturing facilities for installation or erection, with or without other specified components, as a finished building or as part of a finished building, which shall include, but not be limited to, residential, commercial, institutional, storage and industrial structures. This part does not apply to mobile homes. Manufactured buildings may also mean, at the option of the manufacturer, any building of open construction made or assembled in manufacturing facilities away from the building site for installation, or assembly and installation on the building site. "As set forth in Florida Statutes 553.36 (11)".

Section 3.24 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. The term also includes park trailer and similar transportable structures placed on a site for 180 days or longer and intended to be improved property.

Section 3.25 National Geodetic Vertical Datum (NGVD)

As corrected in 1929, a vertical control used as a reference for establishing varying elevations within the flood plain.

Section 3.26 New Construction

Means structures for which the “start construction” commenced on or after the effective date of this Ordinance.

Section 3.27 New ~~Mobile~~ Manufactured Homes Park or ~~Mobile~~ Manufactured Home Subdivision

Means a parcel or contiguous parcels of land divided into two or more ~~mobile~~ manufactured home lots for rent or sale for which the construction of facilities for servicing the lot on which the ~~mobile-manufactured~~ 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 Ordinance.

Section 3.28 Recreational Vehicle

Means a vehicle which is:

- a. built on a single chassis;
- b. 400-600 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 as temporary living quarters for recreational, camping, travel, or seasonal use.

~~Section 3.28~~ 3.29 Sand Dunes

Means naturally occurring accumulations of sand in ridges or mounds landward of the beach.

Section 3.30 Special Hazard Area

Means an area having special flood, mudslide (i.e., mudflow) and/or flood-related erosion hazards, as shown on an FHBM or FIRM as Zone A, AO, A1-30, AE, A99, AH, VO, V1-30, VE, V, M or E.

~~Section 3.29~~ 3.31 Start of Construction

(For other than new construction or substantial improvements under the Coastal Barrier Resources Act (P.L. 97-348), includes substantial improvement, and means the date the building permit was issued, provided the actual state of construction, repair, reconstruction or improvement was within 180 days of the permit date. The actual start means that first placement of permanent construction of a structure (including a manufactured home) on a site, such as the pouring of slabs or footing, installation of piles, construction of columns, or any work beyond the stage of excavation or the placement of a manufactured home on a foundation. Permanent construction does not include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers or foundation or the erection of temporary forms; nor

does it include the installation of the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure.

Section ~~3.30~~ 3.32 Structure

Means a walled and roofed building that is principally above ground, a ~~mobile~~ manufactured home, a gas or liquid storage tank, or other man-made facilities or infrastructures.

Section ~~3.31~~ 3.33 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.

Section ~~3.32~~ 3.34 Substantial Improvement

Means the total cost of reconstruction, alteration, rehabilitation, addition, or other improvements to a building (including electrical, plumbing, heating and air conditioning) taking place during a 10 year period, the cost of which equals or exceeds 50 percent of the market value of the building. The market value of the building is the appraised or assessed value of the building prior to the damage occurring. 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 includes structures which have incurred "substantial damage", regardless of the actual repair work performed. It does not include repairs for damage from any origin which are determined to be less than "substantial damage" as defined in this Ordinance. The term does not, however, include:

1. Any project for improvement of a building required to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by the Code Enforcement Official, which have been cause for issuance of a citation or condemnation, and which are solely the minimum necessary to assure safe living conditions; or
2. Any alteration of a "historic structure", provided that the alteration will not preclude the structure's continued designation as a "historic structure", and for which a variance has been granted pursuant to this Ordinance.

Section ~~3.33~~ 3.35 Variance

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

Section ~~3.34~~ 3.36 Violation

Means the failure of a structure or other development to be fully compliant with the community's floodplain management regulations. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in Section 6.04 is presumed to be in violation until such time as that documentation is provided.

ARTICLE IV: GENERAL PROVISIONS

Section 4.01 Lands to Which This Ordinance Applies

This Ordinance shall apply to all areas of special flood hazard within the jurisdiction of Nassau County, Florida.

Section 4.02 Basis For Establishing the Areas of Special Flood Hazard

The areas of special flood hazard identified by the Federal Emergency Management Agency in its letter, dated August 15, 1984, with accompanying maps and other supporting data, and any revision thereto are adopted by reference and declared to be a part of this Ordinance. Additional information from the St. Mary's Basin Study and the Jacksonville Flood Insurance Study (FIS) will be used for base flood elevations.

Section 4.03 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 4.04 Compliance

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

Section 4.05 Abrogation and Greater Restrictions

This Ordinance is not intended to repeal, abrogate, or impair any existing easements, convenience, or deed restrictions. However, where this Ordinance and other conflicts or overlap, whichever imposes the more stringent restrictions shall prevail.

Section 4.06 Interpretation

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

- Considered as minimum requirements.
- Liberally construed in favor of the governing body.
- Deemed neither to limit nor repeal any other powers granted under state statutes.

Section 4.07 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 Nassau County 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 4.08 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 or variance or special exceptions, shall constitute a misdemeanor. Any person who violates this Ordinance or fails to comply with any of its requirements shall, upon conviction thereof, be fined not more than \$500.00 or imprisoned for not more than 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 County from taking such other lawful action as is necessary to prevent or remedy any violation.

ARTICLE V: ADMINISTRATION

Section 5.01 Designation of Local Administrator

The ~~County Engineer~~ Public Works Director is hereby appointed by the Board of County Commissioners as the Local Administrator to administer and implement the provisions of this Ordinance. Said appointment shall be effective as of _____.

Section 5.02 Permit Procedures

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

1. Elevation in relation to mean sea level of the proposed lowest floor (including basement of all structures).
2. Elevation in relation to mean sea level to which any nonresidential structure will be flood-proofed.
3. Provide a certificate from a registered professional engineer or architect that the non-residential flood-proofed structure meets the flood-proofing criteria in Article VI, Section 6.02 (2).
4. Description of the extent to which any watercourse will be altered or relocated as a result of proposed development.
5. Provide a floor elevation on flood-proofing certification after the lowest floor is completed, or in instances where the structure is subject to the regulations applicable to Coastal High Hazard Areas, after placement of the horizontal structural members of the lowest floor. Within twenty one (21) calendar days of establishment of the lowest floor elevation, or flood-proofing by whatever construction means, or upon placement of the horizontal structural member of lowest floor, whichever is applicable, it shall be the duty of the permit holder to submit to the Local Administrator a certification of the elevation of the lowest floor, flood-proofed elevation, or the elevation of the lowest portion of the horizontal structural members of the lowest floor, whichever is applicable, as built, in relation to mean sea level. 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 done within

the twenty one (21) calendar period and prior to submission of the certification shall be at the permit holder's risk. The Local Administrator shall review the floor elevation survey data submitted. Deficiencies detected by such review shall be corrected by the permit holder immediately and prior to further progressive work being permitted to proceed. Failure to submit the survey or failure to make said corrections required hereby, shall be cause to issue a stop-work order for the project.

Section 5.03 Duties and Responsibilities of the Local Administrator

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

1. Review all development permits to assure that the permit requirements of this Ordinance have been satisfied.
2. Advise permittee that additional federal or state permits may be required, and if specific federal or state permits are needed, require that copies of such permits be provided and maintained on file with the development permit.
3. Notify adjacent communities and the State Coordinating Agency prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Emergency Management Agency.
4. Assure that maintenance is provided within the altered or relocated portion of said watercourse so that the flood-carrying capacity if not diminished.
5. Verify and record the actual elevation (in relation to mean sea level) of the lowest floor (including basement) of all now or substantially improved structures, in accordance with Article V, Section 5.02 (5).
6. Verify and record the actual elevation (in relation to mean seal level) to which the new or substantially improved structures have been flood-proofed, in accordance with Article V, Section 5.02 (5).
7. 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.
8. In coastal high hazard areas, the Local Administrator shall review plans for adequacy of breakaway walls in accordance with Article VI, Section 6.02(6)(h).
9. When flood-proofing is utilized for a particular structure, the Local Administrator shall obtain certification from a registered professional engineer or architect.
10. Where interpretation is needed as to the exact location of boundaries of the areas of special flood hazard (for example, where there appears to be a conflict between

a mapped boundary and the natural grade of actual field conditions) the ~~County Engineer~~ Director of Public Works shall make the necessary interpretation, and shall utilize the most accurate topographic mapping available. The elevations published in the FEMA Flood Insurance Study shall be the ruling reference for delineating the boundary of the floodplain. For V-Zones and coastal A-Zones, the elevations to be used are those portrayed on the FIRMs, while for riverine flooding, the stream profile sheets shall be utilized. A person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in this article. Property may not be excluded from the area of special flood hazard as a result of filling, unless a Letter of Map Revision has been approved by FEMA.

11. When based flood elevation data or floodway data have not been provided in accordance with Section 4.02, then the ~~County Engineer~~ Director of Public Works shall obtain, review, and reasonably utilize any base flood elevation and floodway data available from a federal, state or other source, in order to administer the provisions of this Ordinance. Base flood elevations may be derived from data based on the nearest downstream historical structure. Base flood elevations may be estimated using topographic maps, historical flood information, field data (such as high water marks), or scientific engineering methodology. Base flood elevation and floodway data shall be developed and provided for subdivision proposals and other proposed commercial development (including industrial parks, shopping centers, public facilities, and manufactured home parks and subdivisions) which contain at least 5 acres of Special Flood Hazard Area, or 50 lots. Such data shall be submitted to FEMA Region IV office within 30 days of receipt and acceptance by the community for review as a possible map revision.
12. All records pertaining to the provisions of this Ordinance shall be maintained in the office of the Local Administrator.
13. Where the Director of Public Works has determined all or a portion of a property to be located outside of the flood hazard area, yet it is shown as being within the flood hazard area on the FEMA maps, the applicant shall be advised of the need to obtain a Letter of Map Amendment or Revision from the FEMA Region IV office and shall be given an application packet utilizing forms provided by FEMA. While the property may be exempt from the requirements of this Ordinance, flood insurance purchase will remain mandatory until FEMA authorizes a Letter of Map Amendment or Revision.
14. When a development project will cause a reconfiguration of the flood hazard area due to grading, filling, channel alteration or relocation, development of a stormwater management system, or the excavation of lakes, the Director of Public Works shall require the applicant to submit and obtain approval from FEMA of a conditional Letter of Map Revision. Where a floodway is being impacted, this must be obtained prior to construction. Following completion of all or each phase of such a development, the Director of Public Works shall require the applicant to

submit to FEMA the as-built topographic and hydrologic information to obtain final Letter of Map Revision.

Section 5.04 Variance Procedures

1. The Appeal Board shall be established by the Nassau County Board of County Commissioners and shall hear and decide appeals and requests for variances from the requirements of this Ordinance. The Board of County Commissioners may be the Appeal Board.
2. The Appeal Board shall hear and decide appeals when it is alleged there is an error in any requirement, decision, or determination made by the Local Administrator in the enforcement or administration of this Ordinance.
3. Any person aggrieved by the decision of the Appeal Board or any taxpayer may appeal such decision to the Circuit Court.
4. Variances may be issued for the reconstruction, rehabilitation or restoration of structures listed on the National Register of Historic Places or the State Inventory of Historic Places without regard to the procedures set forth in the remainder of this section.
5. In passing upon such applications, the Appeal Board shall consider all technical evaluations, all relevant factors, and:
 - a. the danger that materials may be swept onto other lands to the injury of others;
 - b. the danger of life and property due to flooding or erosion damage;
 - c. the susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
 - d. the importance of the services provided by the proposed facility to the community;
 - e. the necessity to the facility of a waterfront location, where applicable;
 - f. the availability of alternative locations; not subject to flooding or erosion damage, for the proposed use;
 - g. the compatibility of the proposed use with existing and anticipated development;
 - h. the relationship of the proposed use to the comprehensive plan and flood plain management program for that area;

- i. the safety of access to the property in times of flood for ordinary and emergency vehicles;
 - j. the expected heights, velocity, duration, rate of rise and sediment transport of the flood waters and the effects of wave action, if applicable, expected at the site; and,
 - k. the costs of providing governmental services during and after flood conditions including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems, and streets and bridges.
6. Upon consideration of the factors listed above and the purposes of this Ordinance, the Appeal Board may attach such conditions to the granting of variances as it deems necessary to further the purposes of this Ordinances.
7. Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result.
8. Conditions for variances:
- a. Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief,
 - b. 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;
 - 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 nuisance, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances.
 - c. 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.
 - d. The Local Administrator shall maintain the records of all appeal actions and report any variances to the Federal Emergency Management Agency upon request.

ARTICLE VI: PROVISIONS FOR FLOOD HAZARD REDUCTION

Section 6.01 General Standards

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

1. All new construction and substantial improvements shall be anchored to prevent flotation, collapse or lateral movement of the structure.
2. Mobile homes shall be anchored to prevent flotation, collapse, or lateral movement. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. This standard shall be in addition to and consistent with applicable state requirements resisting wind forces.
3. All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.
4. All new construction and substantial improvements shall be constructed by methods and practices that minimize flood damage.
5. All new replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system.
6. 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.
7. On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding.
8. Any alteration, repair, reconstruction, or improvements to a structure which is in compliance with the provisions of this Ordinance, shall meet the requirements of "new construction" as contained in this Ordinance.
9. Electrical, heating, ventilation, plumbing, air conditioning equipment, and other service facilities shall be designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.
10. Adequate drainage paths shall be provided around structures to guide shallow floodwaters and stormwater runoff away from them.
11. Any alteration, repair, reconstruction, or improvement to a building which was built in compliance with the provisions of this Ordinance, shall meet the requirements for "new construction" as contained in this Ordinance.

Section 6.02 Specific Standards

In all areas of special flood hazard where base flood elevation data has been provided, as set forth in Article IV, Section 4.02, or Article V, Section 5.03 (11) the following provisions are required:

1. Residential Construction: New construction or substantial improvement of any residential structure shall have the lowest floor, elevated no lower than one foot above that shown on the FIRM or elevation established by County Ordinance.
2. Non-Residential Construction: New construction or substantial improvement of any commercial, industrial or other non-residential structure shall either have the lowest floor, elevated no lower than one foot above that shown on the insurance rate map or established by County Ordinance, together with attendant utility and sanitary facilities. Structure shall be flood-proofed so that all areas of the structure below the required elevation is water tight and 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 Article V, Section 5.02 (3).
3. Mobile Homes
 - a. No mobile home shall be placed in a floodway or coastal high hazard area, except in an existing mobile home park or existing mobile manufactured home subdivision.
 - b. Replacement of existing mobile homes within existing mobile home parks and subdivisions. Section 60.3 (c)(12) of the National Flood Insurance Program requires that such mobile homes be either elevated to or above the base flood elevation or installed on permanent foundation systems that are no less than 36 inches in height above grade.
 - bc. 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 as follows:
 - i. 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 50 feet and one additional tie per side for mobile homes of 50 feet or more;
 - ii. Frame ties be provided at each corner of the home with four additional ties per side at intermediate points for mobile homes less than 50 feet long and one additional tie for mobile homes 50 feet or longer;

iii. All components of the anchoring system be capable of carrying a force of 4,800 pounds;

iv. Any additions to mobile homes must be similarly anchored.

ed. For new mobile manufactured home parks and subdivision; for expansions to existing mobile manufactured home parks and subdivisions; for existing mobile manufactured parks and subdivisions where the repair, reconstruction or improvement of the streets, utilities and pads exceeds 50 percent of value of the streets, utilities, and pads before the repair, reconstruction or improvement has commenced; and for manufactured homes not placed in a mobile manufactured home park or subdivision require that:

i. Stands or lots are elevated on compacted fill or on pilings so that the lowest floor of the mobile manufactured home will be at or above the base flood level;

ii. Adequate surface drainage and access for a hauler are provided;

iii. In the instance of elevation on pilings;

- lots are large enough to permit steps;
- piling foundations are placed in stable soil no more than 10 feet apart;
- and reinforcement is provided for pilings more than 6 feet above the ground level.

4. Elevated Buildings: New construction or substantial improvement of elevated buildings that include fully enclosed areas formed by foundation and other exterior walls below the base flood elevation shall be designed to preclude finished living space and designed to allow for the entry and exit of floodwater 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 the following minimum criteria:

i. Provide a minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding;

ii. The bottom of all openings shall be no higher than one foot above grade; and

iii. Openings may be equipped with screens, louvers, valves or other covering or devices provided they permit the automatic flow of floodwater in both directions.

- b. Electrical, plumbing and other utility connections are prohibited below the base flood elevation;
 - c. Access to the enclosed area shall be the minimum necessary to allow for parking of vehicles (garage door) or limited storage of maintenance equipment used in connection with the premises (standard exterior door) or entry to the living area (stairway or elevator); and
 - d. The interior portion of such enclosed area shall not be partitioned or finished into separate rooms.
5. Floodways: Located within areas of special flood hazard established in Article IV, Section 4.02, 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:
- a. 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 flood discharge;
 - b. If Article VI, Section 6.02 (4) (a), is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of Article VI.
 - c. Prohibit the placement of any mobile homes, except in an existing mobile home park or existing mobile home subdivision. A replacement mobile home may be placed on a lot in an existing mobile home park or subdivision providing the anchoring standards of Article 6, Section 6.02 (3) ~~(e)~~ (d), and the elevation standards of this Ordinance are met.
6. Coastal High Hazard Areas (V Zones): Located within the areas of special flood hazard established in Article IV, Section 4.02, are areas designated as coastal high hazard areas. These areas have special flood hazards associated with wave wash, therefore, the following provisions shall apply:
- a. No buildings or structures shall be located eastward of the Coastal Construction Control Line.
 - b. All buildings or structures shall be elevated so that the lowest supporting horizontal member (excluding pilings or columns) is located no lower than that shown on the flood insurance rate map with all space below the lowest supporting member open so as not to impede the flow of water. Open lattice work or decorative screening may be permitted for aesthetic

purposes only, any must be designed to wash away in the event of abnormal wave action and in accordance with Article VI, Section 6.02 (6) (h).

- c. All buildings or structures shall be securely anchored on pilings or columns;
- d. All pilings and columns and the attached structures shall be anchored to resist flotation, collapse, and lateral movement due to the effect of wind and water loads acting simultaneously on all building components. The anchoring and support system shall be designed with wind and water loading values which equal or exceed the 100 year mean recurrence interval (one percent annual chance flood).
- e. Compliance with provisions contained in Article VI, Section 6.02 (6)(b), (c) and (d) shall be certified to be a professional engineer or architect;
- f. There shall be no fill used as structural support. Non-compacted fill may be used around the perimeter of a building for landscaping/aesthetic purposes provided the fill will wash out from storm surge, (thereby rendering the building free of obstruction) prior to generating excessive loading forces, ramping effects, or wave deflection. The Administrator shall approve design plans for landscaping/aesthetic fill only after the applicant has provided an analysis by an engineer, architect, and/or soil scientist, which demonstrates that the following factors have been fully considered:
 - i. Particle composition of fill material does not have a tendency for excessive natural compaction;
 - ii. Volume and distribution of fill will not cause wave deflection to adjacent properties;
 - iii. Slope fill will not cause wave run-up or ramping; and
 - iv. If aesthetic lattice works or screening are utilized, such enclosed space shall not be used for human habitation; but shall be designated to be used only for parking of vehicles, building access, or limited storage of maintenance equipment used in connection with the premises.
- g. There shall be no alteration of sand dunes or mangrove stands which would increase potential flood damage;
- h. Lattice work or decorative screening shall be allowed below the base flood provided they are not designed to breakaway, under abnormally high tides

or wave action, without damage to the structural integrity of the building on which they are to be used and provided the following design specifications are met:

- i. No solid walls shall be allowed; and
 - ii. Material shall consist of wood or mesh screening only.
- i. If aesthetic lattice works or screening are utilized, such enclosed space shall not be used for human habitation;
 - j. Prior to construction, plans for any structure that will have lattice work or decorative screening must be submitted to the Local Administrator for approval;
 - k. Prohibit the replacement of manufactured homes, except in an existing ~~mobile~~ manufactured home park or existing ~~mobile~~ manufactured home subdivision; or replacement manufactured homes must be banned.
 - l. Any alteration, repair, reconstruction or improvements to a structure shall not enclose the space below the lowest floor except for lattice work or decorative screening.

Section 6.03 Standards for Unnumbered “A” Zones and Streams for Which Floodways Have Not Been Established

Located within the A-Zone areas of special flood hazard established in Section 4.02, are areas denoted with the letter “A” with no suffix, referred to as “unnumbered A zones”. These are areas where special flood hazards exist but where no base flood or floodway data has been provided, the following provisions apply:

1. No encroachments, including fill material or structures shall be located within a distance of the stream bank equal to five times the width of the stream at the top of the bank or 20 feet each side from top of the bank, whichever is greater, unless a floodway has been delineated in accordance with Section 4.02. If a floodway has been delineated, the requirements of Section 6.02 (5) shall apply.
2. New construction or substantial improvements of buildings or manufactured homes shall be elevated or flood-proofed in accordance with the design standards of Section 6.01 and 6.02 to the higher of the following:
 - a. The elevations established in accordance with Section 6.04 (4), if available, or
 - b. At least 2 foot above the highest adjacent natural grade.

3. For all development projects, including mobile home parks and subdivisions, which contain at least 5 acres of Special Flood Hazard Area, or 50 lots, greater than 5 acres or 50 lots, whichever is lesser, base flood elevation and floodway data shall be provided in accordance with Section 6.04 (4), as part of the development proposal.

Section 6.04 Standards for Subdivision Proposals

1. All subdivision proposals shall be consistent with the need to minimize flood damage;
2. All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage;
3. All subdivision proposals shall have adequate drainage provided to reduce exposure to flood hazards; and
4. Base flood elevation data shall be provided for subdivision proposals and other proposed commercial development which contain at least 5 acres of Special Flood Hazard Area, or 50 lots, which is the greater than the lesser of 50 lots or 5 acres greater than 5 acres or 50 lots, which ever is lesser.

Section ~~6.04~~ 6.05 Standards for Areas of Shallow Flooding (AO Zones)

Located within the areas of special flood hazard established in Article III, Section 3.02, are areas designated as shallow flooding. These areas have special flood hazards associated with base flood depths of one to three feet where a clearly defined channel does not exist and where the path of flooding is unpredictable and indeterminate; therefore, the following provisions apply:

1. All new construction and substantial improvements of residential structures shall have the lowest floor including basement, elevated to the depth number specified on the Flood Insurance Rate Map, in feet above the highest adjacent grade. If no depth number is specified, the lowest floor, including basement, shall be elevated, at least two feet 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 to the depth number specified on the Flood Insurance Rate Map, in feet above the highest adjacent grade. If no depth number is specified, the lowest floor, including basement, shall be elevated at least two feet above the highest grade, or;

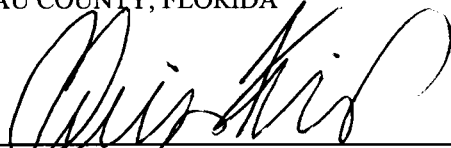
- b. Together with attendant utility and sanitary facilities to be completely flood-proofed to or above that level so that any space below that level is watertight with walls substantially impermeable to the passage of water and with structural components having capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy.

Section 6.06 Standards for Subdivision Proposals

- 1. All subdivision proposals shall be consistent with the need to minimize flood damage;
 - a. Have the lowest floor, including basement, elevated to the depth number specified on the Flood Insurance Rate Map, in feet above the highest adjacent grade. If no depth number is specified, the lowest floor, including basement, shall be elevated at least two feet above the highest grade, or;
 - b. Together with attendant utility and sanitary facilities be completely flood-proofed to or above that level so that any space below that level is watertight with walls substantially impermeable to the passage of water and with structural components having capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy.

DONE and ADOPTED in regular session this 12th day of January, 1998.

BOARD OF COUNTY COMMISSIONERS
NASSAU COUNTY, FLORIDA



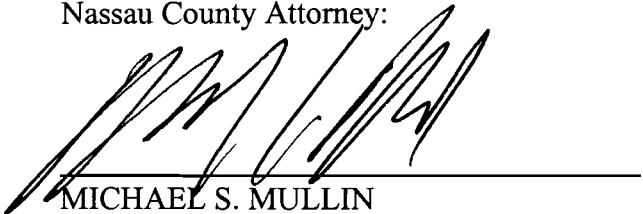
CHRIS KIRKLAND
Its: Chairman

ATTEST:



J.M. "CHIP" OXLEY, JR.
Its: Ex-Officio Clerk

Approved as to form by the
Nassau County Attorney:



MICHAEL S. MULLIN