### ORDINANCE 2002 - 49

AN ORDINANCE AMENDING ORDINANCE 84-13, AS AMENDED, KNOWN AS THE NASSAU COUNTY FLOOD PLAIN ORDINANCE; SPECIFICALLY AMENDING ARTICLE III, DEFINITIONS; ARTICLE V, ADMINISTRATION; ARTICLE VI, PROVISIONS FOR FLOOD HAZARD REDUCTION; PROVIDING AN EFFECTIVE DATE.

WHEREAS, the Board of County Commissioners has found it necessary to further amend Ordinance 84-13, as amended.

NOW, THEREFORE, BE IT ORDAINED this 21st day of October, 2002, by the Board of County Commissioners of Nassau County, Florida, that Ordinance 84-13, as amended, shall be further amended as follows:

1. ARTICLE III: DEFINITIONS

#### Section 3.28 - Recreational Vehicle

Means a vehicle which is:

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- a. Built on a single chassis;
- b. <u>Six hundred (600)</u> 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 only, as temporary living quarters for recreational, camping, travel, or seasonal use.; and
- e. 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 permanent attached additions.

2. ARTICLE V: ADMINISTRATION

#### Section 5.01, Designation of Local Administrator

The Public Works Director <u>Building Official</u> is hereby appointed by the Board of County Commissioners as the Local Administrator to administer and implement the provisions of this Ordinance. <u>Said appointment shall be effective as of</u>

### 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.
- Provide a floor elevation on or flood-proofing 5. 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 day 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.

6. <u>Provide a finish construction Flood Elevation</u>
Certificate prior to Final Inspection.

## 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 is 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 sea 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.
- 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 <del>Director of Public Works</del> Building Official 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 street 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 <del>Director of Public Works</del> Building Official 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 provisions of this Ordinance. Base flood elevations may be data based on the nearest downstream derived from historical structure. Base flood elevations may be estimated using topographic maps, historical information, field data (such as high water marks), or scientific engineering methodology. Base flood elevation and floodway data shall be developed and provided for and proposed commercial subdivision proposals other development (including industrial parks, shopping centers, facilities, and manufactured home public parks subdivisions) which contain at least five (5) acres of Special Flood Hazard Area, or fifty (50) lots. Such data shall be submitted to FEMA Region IV office within thirty (30) days of receipt and acceptance by the community County for review as a possible map revision.

- 12. All records pertaining to provisions of this Ordinance shall be maintained in the office of the Local Administrator.
- Official 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 Building Official 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 Building

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

3. ARTICLE VI: PROVISIONS FOR FLOOD HAZARD REDUCTION

### 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 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 Building 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 manufactured home subdivision.
- b. Replacement of existing mobile homes within existing mobile home parks and subdivision. 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 <a href="https://doi.org/10.1001/journal.org/">https://doi.org/10.1001/journal.org/</a> inches in height above grade.
- c. All mobile homes shall be anchored to resist flotation, collapse, or lateral movement by providing overthe-top and frame ties to ground anchors. Specific requirements shall be as follows:
- i. Over-the-top ties <u>shall</u> 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 <u>fifty (50)</u> feet and <del>one</del> <u>two</u> additional ties per side for mobile homes of fifty (50) feet or more;

- ii. Frame ties <u>shall</u> be provided at each corner of the home with four <u>(4)</u> additional ties per side at intermediate points for mobile homes less than <u>fifty</u> <u>(50)</u> feet long and one additional tie for mobile homes fifty (50) feet or longer;
- iii. All components of the anchoring system shall be capable of carrying a force of 4,800 pounds;
- iv. Any additions to mobile homes must be similarly anchored.
- d. For manufactured home parks new and subdivisions; for expansions to existing manufactured home parks and subdivisions; for existing manufactured parks and subdivisions where the repair, reconstruction or improvement of the streets, utilities and pads exceeds fifty (50) percent of the value of the streets, utilities, and pads before the repair, reconstruction or improvement has commenced; and for manufactured homes not placed in a manufactured home park or subdivision shall require that:
- i. Stands or lots are elevated on compacted fill or on pilings so that the lowest floor of

the manufactured home will be at  $\frac{1}{2}$  one (1) foot 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
   without violation of zoning set back requirement;
- Piling foundations are placed in stable
   soil no more than ten (10) feet apart;
- And reinforcement is provided for pilings more than six (6) feet above the ground.
- iv. Recreational vehicles located on approved sites located within Zones A1-30, AH, and AE shall comply with *one* of the following:
- Be on the site for fewer than one hundred eighty (180) days and be fully licensed and be ready for highway use; or
- <u>Meet the elevation and anchoring</u>

  requirements for "mobile homes" (manufactured homes) as

  stipulated elsewhere in this section.
- 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 (2) openings having a total net area of not less than one (1) square inch for every square foot of enclosed area subject to flooding;
- ii. The bottom of all openings shall be no higher than one (1) 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 IV, Section

6.02(3)(d), and the elevation standards of this Ordinance are met.

- that a floodway has not been designated, no new construction, substantial improvement, or other development (including fill) shall be permitted 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 (1') at any point within the County.
- 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 such open lattice work or decorative screening 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 one hundred (100) year mean recurrence interval (one percent (1%) annual chance of 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 designed to be used only for parking 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 manufactured home park or existing manufactured home subdivision; or replacement of 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 and structures, shall be located within a distance of the stream bank equal to five (5) times the width of the stream at the top of the bank or twenty (20) feet on each side from the 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 Sections 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 two (2) foot feet above the highest adjacent natural grade plus one (1) additional foot as required by Section 6.02(1).
- 3. For all development projects, including mobile home parks and subdivisions, which contain at least <u>five</u> (5) acres of Special Flood Hazard Area, or fifty (50) lots,

base flood elevation and floodway data shall be provided in accordance with Section 6.04(4), as part of the development proposal.

4. EFFECTIVE DATE: This Ordinance shall become effective upon its being filed in the Office of the Secretary of State.

BOARD OF COUNTY COMMISSIONERS NASSAU COUNTY, FLORIDA

NICK D. DEONAS Its: Chairman

ATTEST:

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

Approved as to form by the Nassau County Attorney

h/anne/ords/flood-plain-amd