

**ORDINANCE NO. 2011 - \_\_\_\_\_**

**AN ORDINANCE OF THE BOARD OF COUNTY COMMISSIONERS OF COLLIER COUNTY, FLORIDA, REPEALING ORDINANCE NO. 86-28, AS AMENDED, RELATING TO FLOOD DAMAGE PREVENTION, IN ORDER TO ADOPT, TO THE EXTENT APPLICABLE, THE REGULATIONS AND POLICIES SET FORTH IN THE STATE OF FLORIDA MODEL FLOOD DAMAGE PREVENTION ORDINANCE; PROVIDING FOR STATUTORY AUTHORIZATION, FINDINGS OF FACT, PURPOSE, AND OBJECTIVES; PROVIDING FOR ACRONYMS AND DEFINITIONS; PROVIDING FOR GENERAL PROVISIONS; PROVIDING FOR ADMINISTRATION; PROVIDING FOR PROVISIONS FOR FLOOD HAZARD REDUCTION; PROVIDING FOR VARIANCE PROCEDURES; PROVIDING FOR REPEAL OF ORDINANCE NO. 86-28, AS AMENDED, IN ITS ENTIRETY; PROVIDING FOR CONFLICT AND SEVERABILITY; PROVIDING FOR INCLUSION IN THE CODE OF LAWS AND ORDINANCES; AND PROVIDING FOR AN EFFECTIVE DATE.**

**WHEREAS**, the Collier County Board of County Commissioners (Board) seeks to protect the health, safety and welfare of the citizens of Collier County; and

**WHEREAS**, Chapter 125, Florida Statutes, establishes the right and power of counties to provide for the health, welfare and safety of existing and future residents by enacting and enforcing regulations necessary for the protection of the public including Flood damage prevention ordinances; and

**WHEREAS**, the Board had previously adopted a Flood Damage Prevention Ordinance through Ordinance No. 86-28, which was subsequently amended by Ordinance Nos. 87-80, 90-31, and 2005-51; and

**WHEREAS**, the Board desires to replace, to the extent applicable, Collier County's current Flood Damage Prevention Ordinance with the regulations and policies set forth in the State of Florida Model Flood Damage Prevention Ordinance.

NOW, THEREFORE, BE IT ORDAINED BY THE BOARD OF COUNTY COMMISSIONERS OF COLLIER COUNTY, FLORIDA, that:

**SECTION ONE: STATUTORY AUTHORIZATION, FINDINGS OF FACT, PURPOSE, AND OBJECTIVES**

**A. STATUTORY AUTHORIZATION.**

The Legislature of the State of Florida has authorized and delegated in Chapter 125, Florida Statutes, the responsibility of local government units to adopt regulations designed to promote the public health, safety, and general welfare of its citizenry. Therefore, the Board of County

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Commissioners of Collier County does hereby adopt the following Floodplain management regulations.

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

- (1) The Flood hazard areas of Collier County are subject to periodic inundation from intense rain storms and/or tropical cyclone storm surge, which could result 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.

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

It is the purpose of this Ordinance to save lives, promote the public life 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 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 Floodwaters;
- (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.

### **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;

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- (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 public 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 Special flood hazard area.

**SECTION TWO: ACRONYMS AND DEFINITIONS.**

**A. ACRONYMS**

BFE	Base flood elevation
CCCL	Coastal Construction Control Line
CFR	Code of Federal Regulations
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FIS	Flood Insurance Study
NAVD	North American Vertical Datum
NFIP	National Flood Insurance Program
NGVD	National Geodetic Vertical Datum
SFHA	Area of special flood hazard or Special flood hazard area
SWEL	Stillwater flood elevation
WSWT	Wet season water table

**B. 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. All definitions used in this Flood Damage Prevention Ordinance are only applicable to this Ordinance and do not supersede any other Land Development Code definitions.

*Accessory 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.

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Accessory structures should constitute a minimal investment, may not be used for human habitation, and be designed to have minimal Flood damage potential.

*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 (SFHA)* 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." The area is designated on the FIRM for all Flood zones beginning with the letter "V" or "A".

*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 (BFE)* 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.

*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.

*Building* — see "Structure".

*Coastal construction control line (CCCL)* means the landward extent of that portion of the beach-dune system which is subject to severe fluctuations based upon a 100-year storm surge, storm waves, or other predictable weather conditions as established by the Florida Department of Environmental Protection on June 28, 1989, in accordance with F.S. § 161.053, as amended or superseded.

*Coastal high hazard area* means an SFHA extending from offshore to the inland limit of a Primary frontal dune along an open coast and any other area subject to high velocity wave action from storms or seismic sources. The area is designated on the FIRM, as Zone V1 - V30, VE, or V.

*Compensatory storage* means the volume of water storage provided to replace the volume of water displaced by construction activity within the designated floodplain. The volume is calculated for the vertical distance between the WSWT and the BFE.

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*Cosmetic repair* means the cleaning, sanitizing and resurfacing (e.g. sanding, repair of joints, repainting) of a Flood damage-resistant material.

*Datum* means a reference surface used to ensure that all elevation records are properly related. The current national Datum is the North American Vertical Datum (NAVD) of 1988. The National Geodetic Vertical Datum (NGVD) of 1929 is no longer supported by the National Geodetic Survey.

*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.

*Development permit* means, for the purposes of this Ordinance, the local site Development or Building permit, as applicable, (i.e., any County authorization which must be approved by the County prior to proceeding with any "Development"). A review of a development permit in order to determine compliance with this Ordinance will not result in a separate fee or review process.

*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.

*Existing Construction* means, for the purposes of Floodplain management, Structures for which "the Start of construction" commenced before September 4, 1979. Existing construction, means for the purposes of determining Flood insurance premium rates, Structures for which the "Start of construction" commenced before September 14, 1979. 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) was completed before September 4, 1979.

*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).

*Federal Emergency Management Agency (FEMA)* means the federal agency under which the National Flood Insurance Program (NFIP) is administered. In March 2003, FEMA became part of the newly created U.S. Department of Homeland Security.

*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.

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- (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 damage-resistant material* means any building product (material, component or system) capable of withstanding direct and prolonged (at least 72 hours) contact with Floodwaters without sustaining significant damage that requires more than Cosmetic repair. To be considered as a Flood damage-resistant material, it must not cause degradation of adjacent materials or the systems of which the material is a part.

*Flood Insurance Rate Map (FIRM)* means an official map of the community, issued by FEMA, which delineated both the SFHA 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, and other related data and information.

*Floodplain* means any land area susceptible to being inundated by water from any source (see definition of "Flood or 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 controls 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. That individual is the County Manager, or his designee. As of the adoption of this Ordinance, the Deputy Administrator of the Growth Management Division is the County Manager's designee. The County Manager may only change such designation in writing.

*Floodplain management regulations* means this Ordinance and other zoning ordinances, subdivision regulations, Building codes, health regulations, special purpose ordinances (such as a

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Floodplain ordinance, grading ordinance, and erosion control ordinance) and other applications of police powers 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.

1. Dry Floodproofing utilizes construction materials, and techniques able to withstand the hydrostatic and hydrodynamic loads and buoyancy forces that would be caused by Flood depths, pressures, velocities, impact, and uplift forces associated with the Base flood and keep Floodwaters from entering the Building up to the BFE.
2. All areas of the Building components below the BFE must be water tight with walls substantially impermeable to the passage of water, and contain an internal seepage collection, control and discharge system capable of operating during periods of electrical power loss.
3. The internal seepage collection, control and discharge system (e.g., sump pump) must be capable of handling an allowable seepage rate for the entire Building up to four (4) inches of water depth during a 24-hour period (103 gallons/hour/1,000 square feet).
4. In designing the Building to be substantially impermeable, the allowable seepage calculation assumes that the internal seepage collection, control and discharge system is not in place and functioning, so it cannot be used in the calculations to offset the leakage to below four (4) inches per 24 hours.
5. For existing Buildings where no internal seepage collection, control and discharge system was provided, the maximum allowable seepage rate for the entire Building is one quarter ( $\frac{1}{4}$ ) inch of water depth during a 24-hour period (6.5 gallons/hour/1,000 square feet).
6. Flood damage-resistant materials must be used in all areas where such seepage is likely to occur.
7. The Building's utilities and sanitary facilities, including heating, air conditioning, electrical, water supply, and sanitary sewage services, must be located above the BFE, completely enclosed within the Building's watertight walls or made watertight and capable of resisting damage during Flood conditions.
8. Dry Floodproofing components for openings through the substantially impermeable walls (e.g., doors, windows, etc.) must be installed within four (4) hours after issuance of a Flood warning or a hurricane warning by the National Hurricane Center.

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9. Wet Floodproofing utilizes Flood damage-resistant materials and techniques able to withstand prolonged submergence without damage and readily allow Floodwaters to enter and leave the Building up to the BFE.

*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. There are no FEMA designated Floodways in Collier County, Florida.

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

*Florida Building Code* means the family of codes adopted by the Florida Building Commission, including: *Florida Building Code, Building*; *Florida Building Code, Residential*; *Florida Building Code, Existing Building*; *Florida Building Code, Mechanical*; *Florida Building Code, Plumbing*; *Florida Building Code, Fuel Gas*.

*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 that 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 which cannot be used for its intended purpose unless it is located or carried out in close proximity to water, and includes only 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 Hardship 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.

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*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 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 non-elevation design standards of this Ordinance.

*Mangrove stand* means an assemblage of mangrove trees which are mostly low trees noted for a copious Development of interlacing adventitious roots above ground and which contain one or more of the following species: Black mangrove (*Avicennia germinans*); red mangrove (*Rhizophora mangle*); white mangrove (*Laguncularia racemosa*); and buttonwood (*Conocarpus erecta*).

*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.

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*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 the 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. Existing elevation information based upon NGVD and used for Floodplain purposes prior to the effective date of this Ordinance may continue to be used provided there is also converted elevation information based upon NAVD. After the effective date of this Ordinance, all elevation information submitted with a Development permit shall utilize NAVD.

*New construction* means, for Floodplain management purposes, any Structures for which the Start of construction commenced on or after September 4, 1979. 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 September 14, 1979, 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 September 4, 1979.

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

*Primary frontal dune* means a continuous or nearly continuous mound or ridge of sand with relatively steep seaward and landward slopes immediately landward and adjacent to the beach and subject to erosion and overtopping from high tides and waves during major coastal storms. The inland limit of the Primary frontal dune occurs at the point where there is a distinct change from a relatively steep slope to a relatively mild slope.

*Professional engineer* means an engineer registered and/or licensed by the State of Florida to practice engineering in Florida.

*Professional land surveyor or professional surveyor and mapper* means a surveyor registered and/or licensed by the State of Florida to engage in the practice of land surveying in Florida.

*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* means anything which is not injurious to safety or health of the entire community or a neighborhood, or any considerable number of persons, or does not unlawfully obstruct the free passage or use, in the customary manner, of any navigable lake, or river, bay, stream, canal, or basin.

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*Reasonably safe from flooding* means Base floodwaters 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.

*Registered architect* means an architect registered and/or licensed by the State of Florida to practice architecture in Florida.

*Regulatory floodway* — see "Floodway".

*Riverine* means relating to, formed by, or resembling a river (including tributaries), stream, brook, etc. where the source of water originates from rainfall and not coastal surge.

*Sand dunes* mean naturally occurring accumulations of sand in ridges or mounds landward of the beach.

*Shallow flooding* - see Area of shallow flooding.

*Special flood hazard area (SFHA)* — see Area of special flood hazard.

*Start of construction* 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.

*Stemwall foundation* means a concrete or masonry wall extending from the footing to above grade or base flood elevation. The enclosed area within the vertical walls is filled with compacted material and slab poured over fill and vertical wall.

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*Stillwater flood elevation (SWEL)* means the Flood level resulting from astronomical tides and storm surge Flooding during a projected 1-percent-annual-chance Flood, or Base flood. The SWEL does not include wind driven waves which ride on top of the SWEL.

*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.

*Substantial improvement* means any reconstruction, rehabilitation, addition, or other improvement of a Structure, the 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.

*Temporary housing:* Typically provided by FEMA or the Florida Division of Emergency Management (FDEM) in accordance with guidance noted in the Stafford Act and/or the Post-Katrina Emergency Management Reform Act and similar laws. FEMA or the Florida Division of Emergency Management may provide housing resources via its contractor or other approved agency such as the U.S. Department of Housing and Urban Development and others to provide for emergency housing including but not limited to: modular homes, mobile homes, component homes, cottages, camper trailers, or some other type of temporary living quarters intended to house displaced residents impacted by a natural or man-made disaster event for periods not exceeding (18) eighteen months unless extended by the Board of County Commissioners. Such Temporary housing efforts may be excluded from the Floodplain regulation(s) in light of the urgent need for Temporary housing. Such exclusions may further require an emergency notification and evacuation plan to be completed to ensure the safety of the occupants of the Temporary housing efforts. This emergency notification and evacuation plan will be approved by the Collier County Department of Emergency Management within 30 days of occupancy within the Temporary housing efforts.

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

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*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 the channel and banks of 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. The Watercourse does not include the adjoining Floodplain areas.

*Waterway* means an area within the Riverine (not coastal surge) portion of the SFHA with depth of Flooding equal to, or greater than, three (3) feet.

*Water surface elevation* means the height, in relation to the NAVD of 1988, of Floods of various magnitudes and frequencies in the Floodplains of coastal or Riverine areas.

*Wet season water table elevation (WSWT)* means the elevation, in relation to the NAVD of 1988, of the groundwater during that period of time each year in which the upper surface of the groundwater, or that level below which the soil or underlying rock material is wholly saturated with water, can normally be expected to be at its highest level. Water table elevation is measured from the soil surface downward to the upper level of saturated soil or upward to the free water level. The WSWT may be determined using the South Florida Water Management District's methodology for determining the seasonal high water table contained in the District's Environmental Resource Permit Information Manual Volume IV (September 2010, as may be amended), pages CA-1—CA-7, or other methodology as approved by the Florida Department of Environmental Protection.

*Zone A* means the Flood insurance rate zone used for 1-percent-annual-chance (Base flood) Floodplains that are determined for the FIS by approximate methods of analysis. Because detailed hydraulic analyses are not performed for such areas, no BFEs or depths are shown in this zone. Mandatory Flood insurance purchase requirements apply. This term should not be confused with the term "A-Zones" which means all Flood zones starting with the letter "A".

*Zone AE* means the Flood insurance rate zone used for the 1-percent-annual-chance Floodplains that are determined for the FIS by detailed methods of analysis. In most instances, BFEs derived from the detailed hydraulic analyses are shown at selected intervals in this zone. Mandatory Flood insurance purchase requirements apply. AE zones are also coastal areas of inundation by the 1-percent-annual-chance Flood, including areas with the 2-percent wave run-up elevation less than 3.0 feet above the ground, and areas with wave heights less than 3.0 feet. These areas are subdivided into elevation zones with BFEs assigned. The AE zone will generally extend inland to the limit of the 1-percent-annual-chance Stillwater flood elevation (SWEL).

*Zone AH* means the Flood insurance rate zone used for areas of 1-percent-annual-chance Shallow flooding from rainfall with a constant water-surface elevation (usually areas of ponding) where average depths are between 1 and 3 feet. BFEs derived from detailed hydraulic analyses are shown at selected intervals within this zone. Mandatory Flood insurance purchase requirements apply.

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*Zone D* means the Flood insurance rate zone for areas where there are possible but undetermined Flood hazards. In areas designated as *Zone D*, no analysis of Flood hazards has been conducted. Flood insurance is optional and available, and the Flood insurance rates for properties in *Zone D* are commensurate with the uncertainty of the Flood risk.

*Zone X* means the Flood insurance rate zone for areas outside the 1-percent-annual-chance Floodplain. No BFEs or depths are shown in this zone, and mandatory Flood insurance purchase requirements do not apply. Flood insurance is optional and available. *Zone X* is typically divided into two sub-regions known as:

- *Zone X (Shaded)* which represents the area outside of the 1-percent annual chance Floodplain but within the 0.2-percent annual chance Floodplain, and
- *Zone X (Unshaded)* which represents the area outside of the 0.2-percent annual chance Floodplain.

*Zone VE* means the Flood insurance rate zone for Coastal high hazard areas where wave action and/or high-velocity water can cause structural damage during the Base flood. They are subdivided into elevation zones with BFEs assigned. Mandatory Flood insurance purchase requirements apply.

### **SECTION THREE: GENERAL PROVISIONS.**

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

This Ordinance shall apply to all SFHAs, and includes lowest floor elevation requirements for non-SFHAs as noted for Building Lowest Floor and Slab Minimum Elevations for all areas of Collier County [see Section 5(A)(16)], within the jurisdiction of the Board of County Commissioners of Collier County, Florida.

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

The SFHA identified by FEMA in the FIS for Collier County, Florida, and Incorporated Areas, dated May 16, 2012, with the accompanying maps and other supporting data, and any subsequent revisions through Letters of Map Revision – Based on Fill, Letters of Map Revision, and Physical Map Revisions, are adopted by reference and declared to be a part of this Ordinance. The FIS and DFIRM are on file at the office of the Clerk to the Board of County Commissioners located at the County Government Center, 3299 Tamiami Trail East, Bldg. F, 4th Floor, Naples, FL 34112.

#### **C. DESIGNATION OF FLOODPLAIN ADMINISTRATOR.**

The Board of County Commissioners of Collier County, Florida, hereby appoints the County Manager or designee to administer and implement the provisions of this Ordinance and is herein referred to as the Floodplain Administrator.

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**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.

**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.

**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.

**G. INTERPRETATION.**

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

- (1) Considered as minimum requirements; and
- (2) Deemed neither to limit nor repeal any other powers granted under State of Florida Statutes.

**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 considerations. 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 SFHA or uses permitted within such areas will be free from Flooding or Flood damages. This Ordinance shall not create liability on the part of the Board of County Commissioners of Collier County, Florida, 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.

**I. PENALTIES FOR VIOLATION.**

Violation of the provisions of this Ordinance, including Violation of conditions and safeguards established in connection with grants of Variance or special exceptions, shall be punishable as provided in the Collier County Consolidated Code Enforcement Ordinance as it may be amended or replaced.

**J. FLORIDA BUILDING CODE COMPLIANCE**

All Development regulated by this Ordinance shall meet or exceed the requirements of the current *Florida Building Code*, including the requirements of referenced publications within the current *Florida Building Code*. In the event that requirements stated within this Ordinance conflict with the current *Florida Building Code*, the requirements of the current *Florida Building Code* shall supersede.

**SECTION FOUR: ADMINISTRATION.**

**A. PERMIT PROCEDURES.**

Application for a Development Permit shall be reviewed by 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 or 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 (NAVD) of the proposed Lowest floor (including Basement) of all Buildings;
- (b) Elevation in relation to Mean sea level (NAVD) to which any non-residential Building will be Floodproofed;
- (c) Certificate from a Professional engineer or Registered architect that the non-residential Floodproofed Building will meet the Floodproofing criteria in SECTION FOUR, A (2) and SECTION FIVE, 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 (NAVD) of the bottom of the lowest horizontal structural member of the Lowest floor and provide a certification from a Professional engineer or Registered architect indicating that they have developed and/or reviewed the structural designs, specifications and plans of the construction and certified that they are in accordance with accepted standards of practice in Coastal high hazard areas.

(2) Construction Stage:

Upon placement of the Lowest floor, or Floodproofing 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 NAVD elevation of the Lowest floor or Floodproofed elevation, or bottom of the lowest horizontal structural

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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 Professional land surveyor or Professional engineer and certified by same. When Floodproofing is utilized for a particular Building said certification shall be prepared by or under the direct supervision of a Professional engineer or Registered 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 Floodproofing 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.

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

Duties of the Floodplain Administrator or staff over which the Floodplain Administrator has supervisory and assigned responsible charge, shall include, but not be limited to:

- (1) Determine which Development Permits require review in order to determine if the terms of this Ordinance are applicable. Criteria used in making such determination includes, but is not limited to:
  - a. The location of the proposed development is within the SFHA;
  - b. The type of development will have a direct impact to the Floodplain;
  - c. The development conflicts with restrictions applicable to this Ordinance.
- (2) Review permits to assure sites are Reasonably safe from Flooding;
- (3) Review all Development permits, including the review of certified plans and specifications for compliance, to verify that the permit requirements of this Ordinance have been satisfied;
- (4) Notify adjacent communities, the Florida Department of Community Affairs — Division of Emergency Management — NFIP Coordinating Office, the South Florida Water Management District, FEMA, and other Federal and/or State of Florida agencies with statutory or regulatory authority prior to any alteration or relocation of a Watercourse;
- (5) Verify 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 NAVD) 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 SECTION FIVE, B (1) and (2) and E (2), respectively;

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- (7) Verify and record the actual elevation (in relation to NAVD) to which the new and substantially improved Buildings have been Floodproofed, in accordance with SECTION FIVE, B (2);
- (8) Interpret the exact location of the boundaries of the SFHA. 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 Section Six of this Ordinance;
- (9) When BFE data and Floodway data have not been provided in accordance with SECTION THREE, B, the Floodplain Administrator shall obtain, review and reasonably utilize any BFE and Floodway data available from a Federal, State of Florida, or any other source, in order to administer the provisions of SECTION FIVE;
- (10) Coordinate all change requests to the FIS and FIRM with the requestor, State of Florida, and FEMA;
- (11) Where BFE is utilized, obtain and maintain records of Lowest floor and Floodproofing elevations for New construction and Substantial improvements in accordance with SECTION FIVE, B (1) and (2), respectively;
- (12) Grant waivers with respect to location and BFE requirements when emergency post disaster Temporary housing resources are needed in Temporary housing missions supported by FEMA, Florida Division of Emergency Management, Collier County Emergency Management and its designees for a period not to exceed eighteen (18) months unless extended by the Board of County Commissioners; and
- (13) Facilitate permitting or assist in waivers imposed by other agencies to allow for the emergency deployment of Temporary housing supported by FEMA, Florida Division of Emergency Management and Collier County Emergency Management and its designees.
- (14) As soon as practicable, but not later than six months after the date such information becomes available, notify FEMA of physical changes affecting flooding conditions by submitting technical or scientific data in accordance with 44 CFR 65.3.

### **SECTION FIVE: PROVISIONS FOR FLOOD HAZARD REDUCTION.**

#### **A. GENERAL STANDARDS.**

In all SFHA, all Development sites including New construction and Substantial improvements shall be Reasonably safe from Flooding by meeting the following provisions:

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- (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) New construction and Substantial improvements shall be constructed with materials and utility equipment resistant to Flood damage as supported by the current Florida Building Code and FEMA Technical Bulletins;
- (3) New construction and Substantial improvements shall be constructed by methods and practices that minimize Flood damage, as supported by the current Florida Building Code and FEMA Technical Bulletins.
- (4) 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 accordance with the manufacturer's specifications in addition to and consistent with applicable State of Florida requirements for resisting wind forces;
- (5) Electrical, heating, ventilation, plumbing, air conditioning equipment and other service facilities, including duct work, shall be located above the BFE or designed 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 Floodwaters into the system so as to meet or exceed the minimum requirements of the Collier County Utilities Standards Manual and all other applicable codes and regulations;
- (7) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of Floodwaters into the systems and discharges from the systems into Floodwaters so as to meet or exceed the minimum requirements of the Collier County Utilities Standards Manual and all other applicable codes and regulations;
- (8) On-site waste disposal (septic) systems shall be located and constructed to avoid impairment to them or contamination from them during Flooding so as to meet or exceed the minimum requirements of the Collier County Department of Health and all other applicable codes and regulations;
- (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 for that alteration, repair, reconstruction or improvement as contained in this Ordinance;

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- (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 (as may be amended or superseded):
  - (a) South Florida Water Management District: in accordance with Chapter 373.036, Florida Statutes, Section (2)(a), Flood Protection and Floodplain Management;
  - (b) Department of Economic Opportunity: in accordance with Chapter 380.05, Florida Statutes, Areas of Critical State Concern, and Chapter 553, Part IV, Florida Statutes, Florida Building Code;
  - (c) Department of Health: in accordance with Chapter 381.0065, Florida Statutes, On-site Sewage Treatment and Disposal Systems; and
  - (d) Department of Environmental Protection, CCCL: in accordance with Chapter 161.053, Florida Statutes, Coastal Construction and Excavation.
- (12) Standards for Subdivision Proposals and other new Proposed Development (including Manufactured homes):
  - (a) Proposals shall be consistent with the need to minimize Flood damage;
  - (b) Proposals 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) Proposals shall have adequate drainage provided to reduce exposure to Flood hazards.
- (13) When proposed New construction and Substantial improvements are wholly or partially located in an SFHA, the entire Structure shall meet the standards for New construction within an SFHA;
- (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 BFEs, the entire Structure shall meet the standards for the most hazardous Flood hazard risk zone and the highest BFE;
- (15) When Floodproofing is utilized for a particular Building, certification shall be obtained from a Professional engineer or Registered architect certifying that all areas of the Building, together with attendant utilities and sanitary facilities, below the required elevation are watertight 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

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with SECTION FIVE, B (2) of this Ordinance. In Coastal high hazard areas, certification shall be obtained from a Professional engineer or Registered 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 Structure member of the Lowest floor is enclosed, it may be done so with open wood or plastic lattice and insect screening or with non-supporting Breakaway walls that meet the standards of SECTION FIVE, E (6) of this Ordinance;

(16) Building Lowest floor and Slab Minimum Elevations for all areas of Collier County:

(a) Plans shall show that construction of the Lowest floor meets the elevation criteria listed below or engineered properly to a site specific design and certified by a Registered architect or Professional engineer; when conflict exists between the FIRM Elevation and others, the higher elevation shall be required:

- i. FIRM Elevation - the elevation that has been established by the Flood Insurance Study (FIS).
- ii. Paved Road - a minimum of 18 inches above the crown of the nearest street or interior finished roadway system if finished with paving; in the event that the nearest street or interior finished roadway system is located on an evacuation route, a minimum of 18 inches above the crown of the nearest side street; or
- iii. Graded or unfinished Road - 24 inches above the crown if graded or otherwise unfinished; or
- iv. Mean Sea Level —Lowest floors should be no lower than elevation 5.7 feet in relation to NAVD of 1988 [with an allowable exception for the bottom of the lowest horizontal structural member of the Lowest floor of accessory structures within the V-Zones as described in SECTION FIVE(D)(13)(h)]; or
- v. Water Management Design-

1. Buildings with projects which have water management routing and storage facilities designed and built for a 25-year, 3-day storm event in accordance with South Florida Water Management District's criteria may use a Lowest floor elevation in accordance with the project's water management designed 100-year zero discharge elevation or the FIRM elevation, whichever is higher.

2. Buildings which are not within projects having water management storage facilities designed and built for a 25-year, 3-day storm event in accordance with South Florida Water Management District's criteria shall use a Lowest

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floor elevation of 18 inches above the adjacent roadway crown elevation or the FIRM elevation, whichever is higher.

- (b) On parcels where unusual topographic conditions exist and the above standard conditions cannot be reasonably applied, the Building Official will consider requests to decrease the Lowest floor elevation. All requests will require an analysis, by a Professional engineer, of the 25-year, three (3) day storm event and the 100-year, 3-day storm event using zero discharge, for the entire discharge, for the entire drainage basin in which the proposed Structure is located. Reductions may be allowed on the basis of the analysis, but in no case shall the Lowest floor be less than the FIRM.
- (c) Slabs for garages, carports, screen enclosures, etc., must be at least equal in elevation to the crown of the nearest street.

### B. SPECIFIC STANDARDS.

In all A-Zones where BFE data have been provided [Zones AE, A1-30, A (with BFE), and AH], as set forth in SECTION THREE, B, the following provisions, in addition to those set forth in SECTION FIVE, 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 the BFE. 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 SECTION FIVE, 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 the BFE. All commercial, industrial, or non-residential Buildings located in A-Zones may be Floodproofed, in lieu of being elevated, provided that all areas of the Building components, together with attendant utilities and sanitary facilities, below the BFE are watertight 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. [NOTE: Floodproofing to just the BFE will result in a higher Flood insurance premium rate for the Structure because the Flood insurance policy requires rating a Structure at one foot below the Floodproofing elevation.] A Professional engineer or Registered 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.

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- (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 elevation 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 Registered 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, partitioned into separate rooms, or temperature-controlled (air conditioned).
- (4) *Standards for Manufactured Homes and Recreational Vehicles.*
- (a) All Manufactured homes to be 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 shall be elevated on a permanent foundation to no lower than the BFE and be securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.

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- (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 subsection, must be elevated so that either:
  - (i) The Lowest floor of the Manufactured home is elevated to no lower than the BFE; 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 in height above the grade and securely anchored to an adequate foundation system to resist flotation, collapse, and lateral movement;
  - (iii) Manufactured or component built temporary homes provided by FEMA, the Florida Division of Emergency Management or the Collier County Department of Emergency Management or its approved contractor or designee may provide post disaster emergency temporary Manufactured homes or similar resources within the Floodplain for a period not to exceed eighteen (18) months unless extended by the Board of County Commissioners.
    - 1. Temporary utility connections for the duration of the Temporary housing efforts will be allowed in accordance with provisions authorized by the Building Code Official; and
    - 2. Such housing when provided must have an emergency notification and evacuation plan in place within 30 days of residency in accordance with guidelines imposed by the FEMA housing administrator or his designee.
- (c) 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 requirements in accordance with SECTION FIVE, B (4) (a) and (b).
- (5) Adequate drainage paths around Structures shall be provided on slopes to guide water away from Structures within areas of Shallow flooding.
- (6) Standards for Waterways with established BFEs, but without Regulatory Floodways.

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Located within the SFHA established in SECTION THREE, B, where Watercourses exist for which BFE data has been provided by FEMA without the delineation of the Regulatory floodway (Zones AE and A1-30), the following provisions, in addition to those set forth in SECTION FIVE, 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 SFHA, 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 FEMA.
- (7) For all Structures located seaward of the CCCL, the lowest floor of all New construction and Substantial improvements shall be elevated to no lower than the 100-year Flood elevation established by the Florida Department of Environmental Protection or by FEMA in accordance with SECTION THREE, B , whichever is higher. All non-elevation design requirements of SECTION FIVE, B, shall apply.
- (8) Accessory Structures. Accessory uses and Structures support and are subordinate to the use of a parcel and shall primarily serve those persons regularly and customarily involved with their use and include only those Structures incidental to a permitted land use located on the same parcel. Uses identified elsewhere in this Ordinance are not accessory uses.
- (a) Accessory structures shall not be used for any other use than parking of vehicles and storage.
  - (b) Accessory structures shall be designed to have low Flood damage potential (wet Floodproofing).
  - (c) Accessory structures shall be constructed and placed on the Building site so as to offer the minimum resistance to the flow of Floodwaters.
  - (d) Accessory structures shall be firmly anchored to prevent flotation which may result in damage to other Structures. This is a mandatory measure, pursuant to 44 CFR Section 60.3(a)(3)(i)
  - (e) Service facilities such as electrical and heating equipment shall be elevated at or above the BFE or Floodproofed.

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- (f) Openings to automatically equalize flood hydrostatic forces on exterior walls during the Base Flood shall be provided below BFE in conformance with 44 CFR Section 60.3(c)(5).
- (g) Steel ISO 10'-20'-40' Storage Containers may be positioned on the earth and anchored as described in SECTION FIVE A (4) above, or secured to piers.
- (h) Vertical tool sheds and storage Buildings may be positioned on the earth and shall be anchored as described in SECTION FIVE A (4), above, or secured to piers.

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

Located within the SFHA established in SECTION THREE, B, where there exist A-Zones for which no BFE data and Regulatory floodway have been provided or designated by FEMA, the following provisions shall apply:

- (1) Require standards of SECTION FIVE, A.
- (2) Require that all new subdivision proposals and other proposed Developments (including proposals for Manufactured home parks or subdivisions) greater than 50 lots or 5 acres, whichever is the lesser, include within such proposals BFE data. Standards set forth in SECTION FIVE, B, shall apply.
- (3) The Floodplain Administrator shall obtain, review, and reasonably utilize any BFE 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 SECTION FIVE, B, shall apply. The Floodplain Administrator shall:
  - (a) Obtain the elevation (in relation to the Mean sea level NAVD) 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 SECTION FIVE, B, (2), the elevation in relation to the Mean sea level (NAVD) to which the Structure has been Floodproofed; and
  - (c) Maintain a record of all such information.
- (4) Notify, in Riverine situations, adjacent communities, the State of Florida, Department of Economic Opportunity, Division of Emergency Management - NFIP Coordinating Office, and the South Florida Water Management District prior to any alteration or relocation of a Watercourse, and submit copies of such notifications to FEMA.

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- (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, including data developed pursuant to SECTION FIVE, C (2), of this Ordinance, the lowest floor of the Structure shall be elevated to no lower than four feet above the Highest adjacent grade or WSWT, whichever is higher, OR if utilizing a pressurized septic design, engineering justifications, considering adjacent Flood elevations and other applicable criteria, may be presented to the Floodplain Administrator for consideration of a lowered floor elevation, but in no case can the Lowest floor be less than three feet above the Highest adjacent grade or WSWT, whichever is higher. Standards set forth in SECTION FIVE, B, shall apply.

**D. SPECIFIC STANDARDS FOR COASTAL HIGH HAZARD AREAS (V-ZONES).**

Located within the SFHA established in SECTION THREE, B, are Coastal high hazard areas, designated as Zones V1-30, VE, or V (with BFE). The following provisions shall apply:

- (1) Meet the standards of SECTION FOUR, A, and SECTION FIVE A, B, (except B (7)), and C.
- (2) All New construction and Substantial improvements in Zones V1-V30, VE, and V (with BFE) shall be elevated on pilings or columns so that:
  - (a) The bottom of the lowest horizontal structural member of the Lowest floor (excluding the pilings or columns) is elevated to no lower than the BFE whether or not the Structure contains a Basement; and
  - (b) The pile or column foundation and Structure attached thereto is anchored to resist floatation, collapse and lateral movement due to the effects of wind and water loads acting simultaneously on all Building components. Water loading will be those values associated with the Base flood. Wind loading values will be those required by applicable State of Florida or local, if more stringent than those of the State of Florida, Building standards.
  - (c) For all Structures located seaward of the CCCL, the bottom of the lowest horizontal structural member of the lowest floor of all New construction and Substantial improvements shall be elevated to the 100-year Flood

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elevation established by the Florida Department of Environmental Protection or the BFE, whichever is the higher.

- (3) A Professional engineer or Registered architect shall develop the structural design, specifications and plans for the construction, and shall certify that the design and methods of construction to be used are in accordance with accepted standards of practice for meeting the provisions of this Section.
- (4) Obtain the elevation (in relation to Mean sea level NAVD) of the bottom of the lowest horizontal structural member of the Lowest floor (excluding pilings and columns) of all new and substantially improved Structures. The Floodplain Administrator shall maintain a record of all such information.
- (5) All New construction and Substantial improvements shall be located landward of the reach of mean high tide.
- (6) Provide that all New construction and Substantial improvements have the space below the Lowest floor either Free of obstruction or constructed with non-supporting Breakaway walls, open wood lattice-work, or insect screening intended to collapse under wind and water loads without causing collapse, displacement, or other structural damage to the elevated portion of the Building or supporting foundation system. For the purposes of this Section, a Breakaway wall shall have a design safe loading resistance of not less than 10 or no more than 20 pounds per square foot. Use of Breakaway walls which exceed a design safe loading resistance of 20 pounds per square foot (either by design or when so required by State of Florida or local codes) may be permitted only if a Professional engineer or Registered architect certifies that the designs proposed meet the following conditions:
  - (a) Breakaway wall collapse shall result from water load less than that which could occur during the Base flood; and
  - (b) The elevated portion of the Building and supporting foundation system shall not be subject to collapse, displacement, or other structural damage due to the effects of wind and water loads acting simultaneously on all Building components (structural and non-structural). The water loading shall be those values associated with the Base flood. The wind loading values shall be those required by applicable Florida or local, if more stringent than those of the State of Florida, Building standards;
  - (c) Such enclosed space shall be usable solely for parking of vehicles, Building access, or storage. Such space shall not be finished, partitioned into multiple rooms, or temperature-controlled (air conditioned).
- (7) Prohibit the use of fill for structural support. No Development permit shall be issued for Development involving fill in Coastal high hazard areas unless it has

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been demonstrated through appropriate engineering analyses that the subject fill does not cause any adverse impacts to the Structure on-site or other properties.

- (8) Prohibit man-made alteration of Sand dunes and Mangrove stands that would increase potential Flood damage.
- (9) Standards for Manufactured Homes:
  - (a) All Manufactured homes to be placed or substantially improved on sites: (i) Outside a 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 in which a Manufactured home has incurred "Substantial damage" as the result of a Flood, must meet the standards of SECTION FIVE, D (2) through (8); or
  - (b) All Manufactured homes placed or substantially improved on other sites in an Existing manufactured home park or subdivision shall meet the requirements of SECTION FIVE, B (4)(b).
- (10) Recreational vehicles placed on sites within Zones VE, V1-V30, V (with BFE) on the FIRM either:
  - (a) Be on the site for fewer than 180 consecutive days;
  - (b) Be fully licensed and ready for highway use (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
  - (c) Meet the requirements of SECTION FIVE, D (2) through (8).
- (11) For all Structures located seaward of the CCCL, the bottom of the lowest horizontal structural member of the Lowest floor of all New construction and Substantial improvements shall be elevated to the Flood elevation established by the Florida Department of Environmental Protection or the BFE, whichever is the higher. All non-elevation design requirements in SECTION FIVE, D (2) through (10) shall apply.
- (12) When fill is proposed, in accordance with the permit issued by the Florida Department of Health, in a Coastal high hazard area, 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 nor cause any adverse impacts to the Structure on-site or other properties by wave ramping and deflection.
- (13) Accessory Structures. The following standards are required to properly regulate Accessory structures in addition to A-Zone requirements:

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- (a) Accessory structures meeting the criteria of small or low-cost, such as small metal/wooden sheds that are "disposable" must be unfinished on the interior, constructed with Flood damage-resistant materials below the BFE and used only for storage.
- (b) Maximum allowable size of Accessory structures in V-Zones is 100 square feet.
- (c) Maximum allowable value of Accessory structures in V-Zones is \$2,500.00.
- (d) Consideration must be given to the effects the debris from the Building will have on adjacent Buildings.
- (e) Detached garages are not allowed in V-Zones.
- (f) The structural system shall utilize pilings, adequately embedded to resist scour and lateral deflection. The lowest horizontal structural member of roof systems, including plates and beams connecting the upright supports of the Structure, shall be placed at or above the BFE.
- (g) Any small Accessory structure enclosure below the BFE shall be constructed with Breakaway walls, such as wooden lattice or insect screening, in conformance with 44 CFR Section 60.3(e)(5).
- (h) Floors shall be at or very close to grade.

**SECTION SIX: VARIANCE AND APPEALS PROCEDURES.**

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

The Board of Zoning Appeals as established by the Board of County Commissioners of Collier County, Florida, shall hear and decide Appeals and requests for Variances from the requirements of this Ordinance.

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

The Board of Zoning Appeals shall hear and decide Appeals when it is alleged an error in any requirement, decision, or determination is made by the Floodplain Administrator in the enforcement or administration of this Ordinance. Any person adversely affected by the decision of the Board of Zoning Appeals may Appeal such decision to the Circuit Court, as provided by law.

**C. VARIANCE PROCEDURES.**

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- (1) A request for a Variance to any requirement of this article shall follow the procedure described in the Collier County Land Development Code Section 10.04.04, as may be amended, for Applications Subject to Type III Review.
- (2) The filing fee for each Variance request shall be that adopted and in effect in the Growth Management Division/Planning and Regulation Fee Schedule, (approved 7-27-10, Resolution 2010-130) as may be amended, replaced or superseded.
- (3) All Variance petitions shall be filed with the County Manager on forms provided and shall include data and information deemed appropriate and necessary by the County Manager.
- (4) In acting upon such Variance applications, the Board of Zoning Appeals shall consider all technical evaluations, all relevant factors, standards specified in other Sections of this Ordinance, 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 for the proposed use which are not subject to Flooding or erosion damage;
  - (g) The compatibility of the proposed use with existing and anticipated Development;
  - (h) The relationship of the proposed use to the plan and Floodplain 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 Floodwaters and the effects of wave action, if applicable, expected at the site;
  - (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; and
  - (l) Grant and facilitate situations in code or regulations in which an unforeseen circumstance has been identified following a natural or man-made disaster in support of the emergent need for post disaster temporary emergency housing. Such efforts, pending the magnitude of the disaster and the need for emergency housing may include efforts to grandfather or retro-actively approve such temporary emergency housing actions, waivers or exemptions when reasonable efforts were implemented to protect life, property and

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minimize suffering in an attempt to stabilize displaced residents and families following a disaster. Where possible such temporary waivers or exemptions following a disaster housing effort shall terminate within eighteen (18) months of issuance unless extended by the Board of County Commissioners.

### D. CONDITIONS FOR VARIANCES.

- (1) Variances may be issued for New construction and Substantial improvements to be erected on a lot of one-half acre or less in size contiguous to and surrounded by lots with existing Structures constructed below the BFE, in conformance with the procedures of Paragraphs (3), (4), (5) and (6) of this Sub-section D
- (2) Variances may be issued for New construction and Substantial improvements and for other Development necessary for the conduct of a Functionally dependent use provided that:
  - a) The criteria of Sub-section F, and Paragraphs (1), (3) and (4) of this Sub-section D are met; and
  - b) The Structure or other Development is protected by methods that minimize Flood damages during the Base flood and create no additional threats to Public safety.
- (3) 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 safety or extraordinary public expense, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances.
- (4) Variances shall only be issued upon a determination that the Variance is the minimum necessary deviation from the requirements of this Ordinance, considering the Flood hazard, to afford relief.
- (5) The County Manager shall maintain the records of all Variance actions and report any Variances to the Federal Insurance Administration upon request.
- (6) Any applicant to whom a Variance is granted shall be given written notice that (i) when a Structure is permitted to be built with the Lowest floor elevation below the BFE the cost of Flood insurance will be commensurate with the increased risk resulting from the Lowest floor being placed below the Base Flood elevation.

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- (7) Upon consideration of the factors listed above and the purpose of this Ordinance, the Board of Zoning Appeals may attach such conditions to the granting of Variances as it deems necessary to further the purposes of this Ordinance.

**E. HISTORIC STRUCTURES.**

Variances may be issued for the repair or rehabilitation of Historic structures upon a determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as a Historic structure and the variance is the minimum necessary deviation from the requirements of this Ordinance to preserve the historic character and design of the structure.

**F. 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.

**SECTION FIVE: INCLUSION IN THE CODE OF LAWS AND ORDINANCES.**

The provisions of this Ordinance shall be made a part of the Code of Laws and Ordinances of Collier County, Florida. The Sections of the Ordinance may be renumbered or re-lettered to accomplish such, and the word "Ordinance" may be changed to "section," "article," or any other appropriate word.

**SECTION SIX: CONFLICT AND SEVERABILITY.**

In the event this Ordinance conflicts with any other Ordinance of Collier County or other applicable law, the more restrictive shall apply. If any phrase or portion of the Ordinance is held invalid or unconstitutional by any court of competent jurisdiction, such portion shall be deemed a separate, distinct and independent provision and such holding shall not affect the validity of the remaining portion.

**SECTION SEVEN: EFFECTIVE DATE.**

This Ordinance shall become effective upon filing with the Florida Department of State.