

ORDINANCE 2009-____

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AN ORDINANCE, TO BE KNOWN AS THE FLOOD DAMAGE PREVENTION ORDINANCE OF 2009; PROVIDING FOR STATUTORY AUTHORIZATION; FINDINGS OF FACT; STATEMENT OF PURPOSE; OBJECTIVES; DEFINITIONS; ACRONYMS; LANDS TO WHICH THIS ORDINANCE APPLIES; BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD HAZARD; DESIGNATION OF FLOODPLAIN ADMINISTRATOR; DEVELOPMENT PERMIT REQUIRED; COMPLIANCE; ABROGATION AND GREATER RESTRICTIONS; INTERPRETATION; WARNING AND DISCLAIMER OF LIABILITY; PENALTIES FOR VIOLATION; PERMIT APPLICATION PROCEDURES; GENERAL STANDARDS FOR FLOOD HAZARD REDUCTION; SPECIFIC STANDARDS FOR A-ZONES WITH BASE FLOOD ELEVATIONS AND WITH OR WITHOUT REGULATORY FLOODWAYS; SPECIFIC STANDARDS FOR A-ZONES WITHOUT BASE FLOOD ELEVATIONS AND REGULATORY FLOODWAYS; SPECIFIC STANDARDS FOR COASTAL HIGH HAZARD AREAS (V-ZONES); SPECIFIC STANDARDS FOR REPETITIVE LOSS PROPERTIES; SPECIFIC STANDARDS FOR SUBDIVISION PLATS; SPECIFIC STANDARDS FOR CRITICAL FACILITIES; SPECIFIC STANDARDS FOR PERIODIC INSPECTION, AND TRAINING FOR INSTALLATION OF DRY FLOODPROOFING COMPONENTS; SPECIFIC STANDARDS FOR FLOOD HAZARD DISCLOSURE; APPEALS PROCEDURE; VARIANCE PROCEDURE, CRITERIA AND NOTICE; PROVIDING FOR CONFLICT AND SEVERABILITY; PROVIDING FOR INCLUSION IN THE CODE OF LAWS AND ORDINANCES; PROVIDING FOR REPEAL AND REPLACEMENT OF COLLIER COUNTY ORDINANCE NO. 86-28 (AS SUBSEQUENTLY AMENDED BY ORDINANCE 87-80, ORDINANCE 90-31, AND ORDINANCE 2005-51); PROVIDING FOR LIBERAL CONSTRUCTION; AND PROVIDING FOR AN EFFECTIVE DATE.

1
2 **WHEREAS**, the Collier County Board of County Commissioners (BCC) seeks to
3 protect the health, safety and welfare of the citizens of Collier County; and
4

5 **WHEREAS**, the flood hazard areas of Collier County are subject to periodic
6 inundation, which could result in loss of life and property, health and safety hazards,
7 disruption of commerce and governmental services, extraordinary public and private
8 expenditures for flood protection, recovery, and relief, and impairment of the tax base, all
9 of which adversely affect the public health, safety and general welfare; and
10

11 **WHEREAS**, losses from flooding may be caused by the cumulative effect of
12 obstructions in floodplains causing increases in flood heights and velocities, and/or by the
13 occupancy in flood hazard areas by uses vulnerable to floods or hazardous to other lands
14 which are inadequately elevated, floodproofed, or otherwise unprotected from flood
15 damages; and
16

17 **WHEREAS**, Chapter 125, Florida Statutes, establishes the right and power of
18 counties to provide for the health, welfare and safety of existing and future residents by
19 enacting and enforcing regulations necessary for the protection of the public including
20 flood damage prevention ordinances; and
21

22 **WHEREAS**, Chapter 163, Part II, (Local Government Comprehensive Planning
23 and Land Development Regulations Act), Florida Statutes, provides that counties shall
24 have the power and responsibility to plan comprehensively for their future development
25 and growth including the adoption and implementation of appropriate land development
26 regulations which are necessary or desirable to implement a comprehensive plan,
27 including the regulations of areas subject to seasonal and periodic flooding as provided in
28 Section 153.3202(2)(d), Florida Statutes; and
29

30 **WHEREAS**, Collier County is a participant in the Community Rating System
31 (CRS) program of the National Flood Insurance Program (NFIP) which is administered
32 by the Federal Emergency Management Agency (FEMA) of the U.S. Department of
33 Homeland Security; and
34

35 **WHEREAS**, Collier County, Florida had previously adopted a Flood Damage
36 Prevention Ordinance (Ordinance 86-28, as subsequently amended by Ordinance 87-80,
37 Ordinance 90-31, and Ordinance 2005-51) and desires to clarify its Flood Damage
38 Prevention Ordinance to assure that its ordinance is compatible with federal and state
39 regulations, including meeting certain criteria in the CRS program;
40

41 **NOW, THEREFORE, BE IT ORDAINED BY THE BOARD OF COUNTY**
42 **COMMISSIONERS OF COLLIER COUNTY, FLORIDA that:**
43

44 **SECTION 1: STATUTORY AUTHORIZATION**

1
2 Chapter 125, Florida Statutes, delegates responsibility to local governmental units to
3 adopt regulations designed to promote the public health, safety and general welfare of its
4 citizenry.

5
6
7 **SECTION 2: FINDINGS OF FACT**
8

- 9 (1) The flood hazard areas of Collier County are subject to periodic inundation, which
10 could result in loss of life, property damage, health and safety hazards, disruption of
11 commerce and governmental services, extraordinary public expenditures for flood
12 protection and relief, and impairment of the tax base, all of which could adversely
13 affect the public health, safety and general welfare.
14
15 (2) These flood losses are caused by the cumulative effect of obstructions in flood
16 plains causing increases in flood heights and velocities, and by the occupancy in
17 flood hazard areas by structures vulnerable to floods or hazardous to the lands
18 which are inadequately elevated, floodproofed, or otherwise inadequately protected
19 from flood damages.
20

21
22 **SECTION 3: STATEMENT OF PURPOSE**
23

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

- 27
28 (1) Restrict or prohibit uses which are dangerous to health, safety and property due to
29 water or erosion hazards, which result in damaging increases in erosion or in flood
30 heights and velocities;
31
32 (2) Require that uses vulnerable to floods, including facilities which serve such uses, be
33 protected against flood damage throughout their intended life span;
34
35 (3) Control the alteration of natural floodplains, stream channels, and natural protective
36 barriers which are involved in the accommodation of flood waters;
37
38 (4) Control filling, grading, dredging and other development which may increase
39 erosion or flood damage; and
40
41 (5) Prevent or regulate the construction of flood barriers which will unnaturally divert
42 floodwaters or which may increase flood hazards to other lands.
43
44

1 **SECTION 4: OBJECTIVES**

2
3 The objectives of this ordinance are to:

- 4
5 (1) Protect human life, health and to eliminate or minimize property damage;
6
7 (2) Minimize expenditure of public money for costly flood control projects;
8
9 (3) Minimize the need for rescue and relief efforts associated with flooding and
10 generally undertaken at the expense of the general public;
11
12 (4) Minimize prolonged business interruptions;
13
14 (5) Minimize damage to public facilities and utilities such as water and gas mains,
15 electric, telephone and sewer lines, roadways, and bridges and culverts located in
16 floodplains;
17
18 (6) Maintain a stable tax base by providing for the sound use and development of flood
19 prone areas in such a manner as to minimize flood blight areas;
20
21 (7) Ensure that potential homebuyers are notified that property is in a special flood
22 hazard area; and
23
24 (8) Ensure that those who occupy the areas of special flood hazard assume
25 responsibilities for their actions.
26
27

28 **SECTION 5: DEFINITIONS**

29
30 Unless specifically defined below, words or phrases used in this ordinance shall be
31 interpreted so as to give them the meaning they have in common usage and to give this
32 ordinance its most reasonable application:
33

34 **Accessory structure** (Appurtenant structure) means a structure that is located on the
35 same parcel of property as the principal structure and the use of which is incidental to the
36 use of the principal structure. Accessory structures should constitute a minimal
37 investment, may not be used for human habitation, and should be designed to have
38 minimal flood damage potential. Examples of accessory structures are detached garages,
39 carports, storage sheds, pole barns, and hay sheds. This does not include a guest house
40 which is defined in the Collier County Land Development Code as an accessory dwelling
41 structure.
42

43 **Act** means the National Flood Insurance Act of 1968, U.S.C. 4001, et. seq, and any
44 amendments thereto.

1
2 **Addition (to an existing building)** means any walled and roofed expansion to the
3 perimeter of an existing building in which the addition is connected by a common
4 loadbearing wall other than a fire wall required by the Standard Building Code. Any
5 walled and roofed addition connected by such fire wall or separated by independent
6 perimeter load bearing walls is new construction.

7
8 **Administrator** means the Federal Insurance Administrator.

9
10 **Anchored** means adequately secured to prevent flotation, collapse, or lateral movement
11 by floodwaters.

12
13 **Anticipated development** means the maximum allowable development intensity in
14 accordance with the current and effective Future Land Use Element of the Collier County
15 Growth Management Plan and the Collier County Land Development Code.

16
17 **Appeal** means a request for a review of the Floodplain Administrator’s interpretation of
18 any provision of this ordinance or a request for a variance.

19
20 **Area of shallow flooding** means a designated AO or AH Zone on the community’s
21 Flood Insurance Rate Map (FIRM) with base flood depths from one to three feet where a
22 clearly defined channel does not exist, where the path of flooding is unpredictable and
23 indeterminate, and where velocity flow may be evident. Such flooding is characterized
24 by ponding or sheet flow.

25
26 **Area of special flood hazard (SFHA)** is the land in the flood plain within a community
27 subject to a one percent or greater chance of flooding in any given year. These areas are
28 designated on the FIRMas flood zones starting with the letter “A” or “V”. This term is
29 synonymous with the phrase “special flood hazard area”.

30
31 **A Zones** means any type of SFHA flood zone designation that begins with the letter “A”.
32 It is not intended to refer to only the specific designation of Zone A which does not have
33 an established base flood elevation (BFE).

34
35 **Base flood** means the flood having a one percent chance of being equaled or exceeded in
36 any given year (also sometimes called the “100-year flood” and the “regulatory flood”).
37 Base flood is the term used throughout this ordinance.

38
39 **Base flood elevation (BFE)** means the elevation shown on the FIRM for Zones AE, AH,
40 A1-A30, AR, AR/A, AR/AE, AR/A1-A30, AR/AH, AR/AO, V1-V30, and VE that
41 indicates the water surface elevation resulting from a flood that has a one (1) percent
42 chance of equaling or exceeding that elevation in any given year.

43

1 **Basement** means any area of a building, including any sunken room or sunken portion of
2 a room, having its floor below ground level (sub-grade) on all sides.

3
4 **Breakaway wall** means a wall that is not part of the structural support of the building and
5 is intended through its design and construction to collapse under specific lateral loading
6 forces without causing damage to the elevated portion of the building or the supporting
7 foundations system.

8
9 **Building** —See “Structure”.

10
11 **Chief Administrative Official** wherever used shall mean the County Manager.

12
13 **Coastal floodplain** means the floodplain area identified by an analysis of the base flood
14 from coastal surge.

15
16 **Coastal High Hazard Area** means a SFHA extending from offshore to the inland limit
17 of a primary frontal dune along an open coast and any other area subject to high velocity
18 wave action from storms or seismic sources. The County shall consider the Coastal High
19 Hazard Area as the area seaward of the Coastal Construction Control Line established by
20 the Florida Department of Natural Resources on June 27, 1989, and the NFIP (V) zones
21 indicated on the FIRM, as zones V1-30, and VE or V, whichever is the most landward.
22 The land mass seaward of this line is considered the Coastal High Hazard Area.

23
24 **Community** means all area within the boundaries of Collier County, Florida, including
25 the incorporated municipalities.

26
27 **Community Rating System (CRS)** means a program developed by FEMA to provide
28 incentives for those communities in the Regular Program of the NFIP that have gone
29 beyond the minimum floodplain management requirements to develop extra measures to
30 provide protection from flooding.

31
32 **County** whenever used in this ordinance shall mean unincorporated Collier County,
33 Florida.

34
35 **Critical facilities** whenever used in this ordinance are identified as

- 36 • Fire stations
- 37 • Sheriff’s office or law enforcement agency facilities (excluding gun range)
- 38 • Emergency Medical Service stations
- 39 • Government agency vehicle and equipment storage facilities
- 40 • Collier County Emergency Operations Center
- 41 • Emergency evacuation centers
- 42 • Water treatment plants, pump stations, and wells
- 43 • Wastewater treatment plants and pump stations

- 1 • Electric power substations
- 2 • Telephone communication centers/switching stations and towers
- 3 • Hospitals
- 4 • Extremely hazardous substances facilities [Superfund Amendments and
- 5 Reauthorization Act (SARA) Title III facilities]
- 6

7 **Datum** means a reference surface used to ensure that all elevation records are properly
8 related.

9
10 **Development** means any man-made change to improved or unimproved real estate,
11 including but not limited to buildings or other structures, mining, dredging, filling,
12 grading, paving, excavation or drilling operations, or storage of equipment or materials.

13
14 **Development permit** means any County permit which must be approved by the County
15 prior to proceeding with any “Development”.

16
17 **Elevated building** means a structure that has no basement and that has its lowest
18 elevated floor raised above ground level by foundation walls, shear walls, posts, piers,
19 columns, or pilings.

20
21 **Elevation** means the measured vertical distance of a location in relation to an official,
22 established datum. Elevation datum may be the National Geodetic Vertical Datum of
23 1929 (NGVD) or North American Vertical Datum of 1988 (NAVD), whichever is
24 specified on the effective FIRM at the time of measurement.

25
26 **Enclosed area or enclosure** means that portion of an elevated building below the lowest
27 elevated floor that is either partially or fully enclosed by rigid walls.

28
29 **Encroachment** means the advance or infringement of uses, plant growth, fill, excavation,
30 buildings, permanent structures or development into a floodplain, which may impede or
31 alter the flow capacity of a floodplain.

32
33 **Existing construction** means, for the purposes of floodplain management, structures for
34 which the “start of construction” commenced before September 14, 1979 (the effective
35 data of the first FIRM for Collier County as previously stated in Ordinance 86-28). This
36 term may also be referred to as “existing structures”.

37
38 **“Existing manufactured home park or subdivision”** means a manufactured home park
39 or subdivision for which the construction of facilities for servicing the lots on which the
40 manufactured homes are to be affixed (including, at a minimum, the installation of
41 utilities, either final site grading or the pouring of concrete pads, and the construction of
42 streets) was completed before September 14, 1979 (the effective date of Collier County's
43 first FIRM and as previously stated in Ordinance 90-31).

44

1 **Existing structure** means a structure for which the "start of construction" commenced
2 before September 14, 1979 (the effective date of Collier County's first FIRM).
3

4 **Expansion to an existing manufactured home park or subdivision** means the
5 preparation of additional sites at an existing manufactured home park or subdivision by
6 the construction of facilities for servicing the lots on which the manufactured homes are
7 to be affixed (including the installation of utilities, either final site grading or pouring of
8 concrete pads, or the construction of streets).
9

10 **Extremely hazardous substances facilities** means all buildings, equipment, structures,
11 and other stationary items which are located on a single site or on contiguous or adjacent
12 sites and which are owned or operated by the same person (or by any person which
13 controls, is controlled by, or under common control with, such person) where chemicals
14 or substances (products or wastes) that have been identified by the United States
15 Environmental Protection Agency (EPA) on the basis of toxicity, reactivity, flammability
16 and/or corrosiveness, and listed under Title III of the SARA are generated, used, or
17 stored.
18

19 **Federal Emergency Management Agency (FEMA)** means the federal agency under
20 which the NFIP is administered. In March 2003, FEMA became part of the newly
21 created U.S. Department of Homeland Security.
22

23 **Flood or flooding** means
24

25 (1) A general and temporary condition of partial or complete inundation of two or more
26 acres of normally dry land area or of two or more properties (at least one of which
27 is the affected policy holder's property) from:
28

29 (a) The overflow of inland or tidal waters.
30

31 (b) The unusual and rapid accumulation or runoff of surface waters from any
32 source.
33

34 (c) Mudslides (i.e., mudflows) which are proximately caused by flooding as
35 defined in paragraph (a) (2) of this definition and are akin to a river of liquid
36 and flowing mud on the surface of normally dry land areas, as when earth is
37 carried by a current of water and deposited along the path of the current.
38

39 (2) The collapse or subsidence of land along a shore of a lake or similar body of water
40 as the result of erosion or undermining caused by waves or currents of water
41 exceeding anticipated cyclical levels or suddenly caused by an unusually high water
42 level in a natural body of water, accompanied by a severe storm or by an
43 unanticipated force of nature, such as a flash flood or an abnormal tidal surge or by

1 some similarly unusual and unforeseeable event which results in flooding as defined
2 in paragraph (1) (a) of this definition.
3

4 **Flood blight area** means an area that has been damaged by floodwaters and the presence
5 of public health and safety conditions exist.
6

7 **Flood elevation determination** means a determination by the Administrator of the water
8 surface elevations of the base flood, that is, the flood level that has a one percent or
9 greater chance of occurrence in any given year.
10

11 **Flood Insurance Rate Map (FIRM)** means an official map, or map series, of the
12 community, issued by FEMA, which delineates both the areas of special flood hazard and
13 the risk premium zones applicable to the community.
14

15 **Flood Insurance Study (FIS)** means the official hydraulic & hydrologic report provided
16 by FEMA used to develop the flood insurance rate maps and the water surface elevation
17 of the base flood. The study contains an examination, evaluation, and determination of
18 flood hazards, and, if appropriate, corresponding water surface elevations, or an
19 examination, evaluation, and determination of mudslide (i.e., mudflow) and other flood-
20 related erosion hazards. The study may also contain flood profiles, as well as the FIRM,
21 and other related data and information.
22

23 **Floodplain or flood-prone area** means any land area susceptible to being inundated by
24 water from any source (see definition of “flood”). Collier County, Florida, being a
25 coastal community, has land areas susceptible to coastal surge flooding and interior basin
26 and riverine floodplain areas susceptible to flooding.
27

28 **Floodplain administrator** means the person designated by the County Manager to be
29 responsible for the administration, implementation and enforcement of the floodplain
30 management regulations of the County.
31

32 **Floodplain management** means the operation of an overall program of corrective and
33 preventive measures for reducing flood damage and preserving and enhancing, where
34 possible, natural resources in the floodplain, including but not limited to emergency
35 preparedness plans, flood control works, floodplain management regulations, and open
36 space plans.
37

38 **Floodplain management regulations** means this ordinance and other zoning ordinances,
39 subdivision regulations, building codes, health regulations, special purpose ordinances
40 (such as a floodplain ordinance, grading ordinance and erosion control ordinance) and
41 other applications of police powers which control development in flood-prone areas. The
42 term describes Federal, State of Florida, or local regulations, in any combination thereof,
43 which provide standards for preventing and/or reducing flood loss and damage.
44

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

- 5 1. Dry floodproofing utilizes construction materials, and techniques able to
6 withstand the hydrostatic and hydrodynamic loads and buoyancy forces that
7 would be caused by flood depths, pressures, velocities, impact, and uplift
8 forces associated with the base flood and keep flood waters from entering the
9 building up to one foot above the base flood plus any required freeboard
10 elevation.
- 11 2. All areas of the building components below the base flood elevation plus one
12 (1) foot, plus any required freeboard, must be water tight with walls
13 substantially impermeable to the passage of water, and contain an internal
14 seepage collection, control and discharge system capable of operating during
15 periods of electrical power loss.
- 16 3. The internal seepage collection, control and discharge system (e.g. sump
17 pump) must be capable of handling an allowable seepage rate for the entire
18 building up to four (4) inches of water depth during a 24-hour period (103
19 gallons/hour/1000 square feet).
- 20 4. In designing the building to be substantially impermeable, the allowable
21 seepage calculation assumes that the internal seepage collection, control and
22 discharge system is not in place and functioning, so it cannot be used in the
23 calculations to offset the leakage to below four (4) inches per 24 hours.
- 24 5. For existing buildings where no internal seepage collection, control and
25 discharge system was provided, the maximum allowable seepage rate for the
26 entire building is one quarter (1/4) inch of water depth during a 24-hour
27 period (6.5 gallons/hour/1000 square feet).
- 28 6. Flood resistant materials must be used in all areas where such seepage is
29 likely to occur.
- 30 7. The building's utilities and sanitary facilities, including heating, air
31 conditioning, electrical, water supply, and sanitary sewage services, must be
32 located above the base flood elevation, plus any required freeboard,
33 completely enclosed within the building's watertight walls or made watertight
34 and capable of resisting damage during flood conditions.
- 35 8. Dry flood proofing components for openings through the substantially
36 impermeable walls (e.g. doors, windows, etc.) must be installed within four
37 (4) hours after issuance of a flood warning or a hurricane warning by the
38 National Hurricane Center.
- 39 9. Wet floodproofing utilizes construction materials and techniques able to
40 withstand prolonged submergence without damage and readily allow
41 floodwaters to enter the building up to one foot above the base flood
42 elevation, plus any required freeboard elevation.
- 43

1 **Floodway** means the channel of a river, canal, or other watercourse and the adjacent land
2 areas that must be reserved in order to discharge the base flood without cumulatively
3 increasing the water surface elevation more than one foot.

4
5 **Floodway fringe** means that area of the floodplain on either side of the regulatory
6 floodway where encroachment may be permitted without additional hydraulic and/or
7 hydrologic analysis.

8
9 **Freeboard** means the additional height, usually expressed as a factor of safety in feet,
10 above a flood level for purposes of floodplain management. Freeboard tends to
11 compensate for many unknown factors, such as wave action, bridge openings and
12 hydrological effect of urbanization of the watershed, which could contribute to flood
13 heights greater than the height calculated for a selected frequency flood and floodway
14 conditions.

15
16 **Functionally dependent use** means a use which cannot perform its intended purpose
17 unless it is located or carried out in close proximity to water, such as a docking or port
18 facility necessary for the loading and unloading of cargo or passengers, shipbuilding or
19 ship repair. The term does not include long-term storage, manufacture, sales, or service
20 facilities.

21
22 **Hardship** as related to variances from this ordinance means the exceptional hardship
23 associated with the land that would result from a failure to grant the requested variance.
24 The community requires that the variance be exceptional, unusual, and peculiar to the
25 property involved. Mere economic or financial hardship alone is not exceptional.
26 Inconvenience, aesthetic considerations, physical handicaps, personal preferences, or the
27 disapproval of one's neighbors likewise cannot, as a rule, qualify as an exceptional
28 hardship. All of these problems can be resolved through other means without granting a
29 variance, even if the alternative is more expensive, or requires the property owner to
30 build elsewhere or put the parcel to a different use than originally intended.

31
32 **Highest adjacent grade** means the highest natural elevation of the ground surface, prior
33 to the start of construction, next to the proposed walls of a structure.

34
35 **Historic structure** means any structure that is:

- 36
37 (1) Listed individually in the National Register of Historic Places (a listing maintained
38 by Department of Interior) or preliminarily determined by the Secretary of the
39 Interior as meeting the requirements for individual listing on the National Register;
40
41 (2) Certified or preliminarily determined by the Secretary of the Interior as contributing
42 to the historical significance of a registered historic district or a district
43 preliminarily determined by the Secretary to qualify as a registered historic district;
44

- 1 (3) Individually listed on a state inventory of historic places in states with historic
2 preservation programs which have been approved by the Secretary of the Interior;
3 or
4
- 5 (4) Individually listed on a local inventory of historic places in communities with
6 historic preservation programs that have been certified either:
7
- 8 a. By an approved state program as determined by the Secretary of the Interior;
9 or
10 b. Directly by the Secretary of the Interior in states without approved programs.
11

12 **Letter of Map Amendment (LOMA)** means an amendment to the currently effective
13 FIRM that establishes that a property is not located in aSFHA. A LOMA is issued only
14 by FEMA.
15

16 **Letter of Map Revision (LOMR)** means an official amendment to the currently
17 effective FIRM. It is issued by FEMA and changes flood zones, delineations, and/or
18 elevations.
19

20 **Lowest adjacent grade** means the lowest elevation, after the completion of construction,
21 of the ground, sidewalk, patio, deck support, or basement entryway immediately next to
22 the structure.
23

24 **Lowest floor** means the lowest floor of the lowest enclosed area (including basement).
25 An unfinished or flood resistant enclosure, usable solely for parking of vehicles, building
26 access, or storage, in an area other than a basement, is not considered a building's lowest
27 floor, provided that such enclosure is built so as to not render the structure in violation of
28 design standards of this ordinance.
29

30 **Mangrove stand** means an assemblage of mangrove trees which are mostly low trees
31 noted for a copious development of interlacing adventitious roots above the ground and
32 which contain one or more of the following species: black mangrove (*Avicennia*
33 *germinans*); red mangrove (*Rhizophora mangle*); white mangrove (*Laguncularia*
34 *racemosa*); and buttonwood (*Conocarpus erecta*).
35

36 **Manufactured home** means a structure, transportable in one or more sections, built on a
37 permanent chassis and designed for use with or without a permanent foundation when
38 connected to the required utilities. The term also includes park trailers, travel trailers, and
39 similar transportable structures placed on a site for 180 consecutive days or longer and
40 intended to be improved property. "Manufactured home" includes mobile homes but
41 does not include "recreational vehicles".
42

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

1 home park or subdivision includes the construction of facilities for servicing the lots on
2 which the manufactured (mobile) homes are to be affixed including, at a minimum, the
3 installation of utilities, the construction of streets, and either final site grading or the
4 pouring of the concrete pads.

5
6 **Map** means the Flood Insurance Rate Map (FIRM) for Collier County, Florida, issued by
7 FEMA, having an effective date of November 17, 2005, as may be amended.

8
9 **Market value** means the building value, which is the real property value excluding the
10 land value and that of the detached accessory structures and other improvements on site
11 (as agreed to between a willing buyer and seller) as established by what the local real
12 estate market will bear. Market value can be established by an independent certified
13 appraisal (other than a limited or curbside appraisal, or one based on income approach),
14 Actual Cash Value (replacement cost depreciated for age and quality of construction of
15 building), or adjusted tax-assessed values.

16
17 **Mean Sea Level (MSL)** means the average height of the sea for all stages of the tide. It
18 is used as a reference for establishing various elevations within the floodplain. For
19 purposes of this ordinance, the term is synonymous with the NGVD of 1929. The NGVD
20 of 1929 can be converted to NAVD. For uses controlled by this ordinance, where
21 elevation information based upon the NGVD is used, the conversion to NAVD is
22 required and the information clearly identified as to which elevation relates to which
23 datum.

24
25 **National Flood Insurance Program (NFIP)** means the program of flood insurance
26 coverage and floodplain management administered under the National Flood Insurance
27 Act of 1968 (as amended) and applicable Federal regulations promulgated in Title 44 of
28 the Code of Federal Regulations, Subchapter B.

29
30 **National Geodetic Vertical Datum (NGVD)** means NGVD of 1929 (formerly called
31 MSL Datum of 1929), a vertical control used as a reference for establishing varying
32 elevations within the floodplain.

33
34 **New construction** means, for floodplain management purposes, any structures for which
35 the “start of construction” commenced on or after September 14, 1979 (the effective date
36 of the first FIRM for Collier County as previously stated in Ordinance 86-28). The term
37 also includes any subsequent improvements to such structures.

38
39 **New manufactured home park or subdivision** means a manufactured home park or
40 subdivision for which the construction of facilities for servicing the lots on which the
41 manufactured homes are to be affixed (including at a minimum, the installation of
42 utilities, the construction of streets and either final site grading or the pouring of concrete
43 pads) was completed on or after September 14, 1979 (the effective date of the first FIRM
44 for Collier County as previously stated in Ordinance 86-28).

1
2 **Non-residential** means small business concerns, churches, schools, farm buildings
3 (including grain bins and silos), pool houses, clubhouses, recreational buildings,
4 mercantile structures, agricultural and industrial structures, warehouses, hotels and motels
5 with normal room rentals for less than six (6) months' duration. Non-Residential does
6 not include nursing homes or any buildings used as emergency evacuation centers in
7 accordance with the Collier County Hazard Mitigation Plan.

8
9 **North American Vertical Datum (NAVD)** of 1988 means the official vertical control
10 used as a reference for establishing varying elevations within the floodplain.

11
12 **On-site sewage treatment and disposal systems** means a system that contains a
13 standard subsurface, filled, or mound drainfield system, an aerobic treatment unit; a
14 graywater system tank; a laundry wastewater system tank; a septic tank; a grease
15 interceptor; a pump tank; a solids or effluent pump; a waterless, incinerating, or organic
16 waste-composting toilet; or a sanitary pit privy that is installed or proposed to be installed
17 beyond the building sewer on land of the owner or on other land to which the owner has
18 the legal right to install a system. The term includes any item placed within, or intended
19 to be used as a part of or in conjunction with, the system. This term does not include
20 package sewage treatment facilities and other treatment works regulated under Chapter
21 403 Florida Statutes.

22
23 **Obstruction** means any type of lower area enclosure or other construction element that
24 will obstruct the flow of velocity water or wave action beneath the lowest horizontal
25 structural member of the lowest floor of an elevated building during a base flood event.
26 This requirement applies to the structures in velocity zones (Zone V1 – V30, VE, or V).

27
28 **Person** includes any individual or group of individuals, corporation, or any other
29 organized group of persons, including State and local governments and agencies thereof.

30
31 **Practice installation of dry floodproofing components** means the periodic and
32 temporary installation of dry floodproofing components on a building designed and
33 approved for dry floodproofing techniques. The practice installation of the components
34 to dry floodproof the entire building must be accomplished within a continuous four (4)
35 hour time frame. It is not necessary to apply moldable sealants (not gaskets) as a part of
36 the practice installation, but sufficient quantities of sealant material, if required as a part
37 of the approved floodproofing method, must be on hand as if it were a real flood
38 situation. A real flood situation installation may also be treated as a practice installation.

39
40 **Pre-FIRM construction** means structures for which the “start of construction”
41 commenced before September 14, 1979, the effective date of Collier County's first FIRM.

42
43 **Program** means the NFIP authorized by the National Flood Insurance Act of 1968, as
44 may be amended.

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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 NFIP.

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

Recreational vehicle means a vehicle that is:

- (1) built on a single chassis;
- (2) measures four hundred (400) square feet or less when measured at the largest horizontal projection;
- (3) designed to be self-propelled or permanently towable by a light duty truck;
- (4) designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel or seasonal use; and
- (5) currently licensed and insured in accordance with the requirements of the State of Florida.

Registered professional architect means an architect registered and/or licensed by the State of Florida to practice architecture in Florida or who is authorized by the State of Florida to practice architecture in Florida under a reciprocal registration or licensing agreement with another State.

Registered professional engineer means an engineer registered and/or licensed by the State of Florida to practice engineering in Florida or who is authorized by the State of Florida to practice engineering in Florida under a reciprocal registration or licensing agreement with another State.

Registered 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 or who is authorized by the State of Florida to practice land surveying in Florida under a reciprocal registration or licensing agreement with another State.

Remedy a deficiency or violation means to bring the regulation, procedure, structure or other development into compliance with State of Florida, Federal or local floodplain

1 management regulations; or if this is not possible, to reduce the impacts of
2 noncompliance. Ways the impacts may be reduced include protecting the structure or
3 other affected development from flood damages, implementing the enforcement
4 provisions of this ordinance or otherwise deterring future similar violations, or reducing
5 Federal financial exposure with regard to the structure or other development.

6
7 **Repetitive loss property** means those structures for which two or more flood insurance
8 claims of more than one thousand (\$1000) dollars have been paid by the NFIP within any
9 ten (10) year period since 1978, and no NFIP-approved mitigation measures have been
10 made to the structure.

11
12 **Riverine** means relating to, formed by, or resembling a river (including tributaries),
13 stream, brook, canal, etc.

14
15 **Riverine floodplain** means the floodplain area identified by an analysis of the base flood
16 from rainfall.

17
18 **Sand dune** means naturally occurring accumulations of sand in ridges or mounds
19 landward of the beach.

20
21 **Sanitary sewage collection/transmission systems** means sewers, pipelines, conduits,
22 pumping stations, force mains, and all other facilities used for collection and transmission
23 of wastewater from individual service connections to facilities intended for the purpose of
24 providing treatment prior to release to the environment.

25
26 **Severe repetitive loss property** means those repetitive loss structures which have
27 incurred flood-related damage resulting in either:

- 28 • four (4) or more separate flood insurance claims payments exceeding five
29 thousand (\$5000) dollars each and twenty thousand (\$20,000) cumulatively, two
30 (2) of which payments were made within a ten (10) year period; or
- 31 • at least two (2) separate flood insurance claims payments, where the cumulative
32 amount of the claims exceeds the value of the structure.

33
34 **Shallow flooding** means the same as area of shallow flooding.

35
36 **Special flood hazard area (SFHA)** means the same as area of special flood hazard.

37
38 **Start of construction** [for other than new construction or substantial improvements
39 under the Coastal Barrier Resources Act (P.L. 97-348)], includes substantial
40 improvement, and means the date the building permit was issued, provided the actual
41 start of construction, repair, reconstruction, rehabilitation, addition or improvement was
42 within 180 days of the permit date. The actual start means the first placement of
43 permanent construction of a building (including a manufactured home) on a site, such as
44 the pouring of slabs or footings, installation of piles, construction of columns, or any

1 work beyond the stage of excavation or the placement of a manufactured home on a
2 foundation. Permanent construction does not include land preparation, such as clearing,
3 grading and filling; nor does it include excavation for a basement, footings, piers or
4 foundations or the erection of temporary forms; nor does it include the installation of
5 streets and/or walkways; nor does it include excavation for a basement, footings, piers or
6 foundations or the erection of temporary forms; nor does it include the installation on the
7 property of accessory buildings, such as garages or sheds not occupied as dwelling units
8 or not part of the main structure.

9
10 For a substantial improvement, the actual start of construction means the first alteration
11 of any wall, ceiling, floor, or other structural part of a building, whether or not that
12 alteration affects the external dimensions of the building.

13
14 **State** means the several states, the District of Columbia, the territories and possessions of
15 the United States of America, the Commonwealth of Puerto Rico, and the Trust Territory
16 of the Pacific Islands.

17
18 **Structure** means:

- 19
20 (1) for floodplain management purposes, a walled and roofed building, including a gas
21 or liquid storage tank that is principally above ground, as well as a manufactured
22 home.
23
24 (2) for flood insurance purposes, :
- 25
26 (a) A building with two or more outside rigid walls and a fully secured roof, that
27 is affixed to a permanent site;
 - 28 (b) A manufactured home (also known as a mobile home), built on a permanent
29 chassis, transported to its site in one or more sections, and affixed to a
30 permanent foundation; or
 - 31 (c) A travel trailer without wheels, built on a chassis and affixed to a permanent
32 foundation, which is regulated under the community's floodplain management
33 and building ordinances or laws.

34
35 For the latter purpose, "structure" does not mean a recreational vehicle or a park
36 trailer or other similar vehicle, except as described in sub-paragraph (2)(c) of this
37 definition, or a gas or liquid storage tank.

38
39 **Substantial damage** means damage of any origin sustained by a structure whereby the
40 cost of restoring the structure to its before damaged condition would equal or exceed
41 forty-nine (49) percent of the market value of the structure, based upon the most recent
42 Collier County property Appraiser valuation, before the damage occurred.

43

1 **Substantial improvement** means any reconstruction, rehabilitation, addition, or other
2 improvement of a structure, the cost of which equals or exceeds forty-nine (49) percent of
3 the market value of the structure before the “start of construction” of the improvement.
4 This term includes structures which have incurred “substantial damage”, regardless of the
5 actual repair work performed. The term does not, however, include either:

- 6
- 7 (1) Any project for improvement of a structure to correct existing violations of state or
8 local health, sanitary, or safety code specifications which have been identified by
9 the local code enforcement official and which are the minimum necessary to assure
10 safe living conditions; or
 - 11
 - 12 (2) Any alteration of a “historic structure”, provided that the alteration will not preclude
13 the structure's continued designation as a “historic structure”.
 - 14

15 **Substantially improved existing manufactured home parks or subdivisions** is where
16 the repair, reconstruction, rehabilitation or improvement of the streets, utilities and pads
17 equals or exceeds forty-nine (49) percent of the value of the streets, utilities and pads
18 before the repair, reconstruction or improvement commenced.

19

20 **Superfund Amendments and Reauthorization Act (SARA) Title III** means “The
21 Comprehensive Environmental Response, Compensation and Liability Act (CERCLA),
22 the original Superfund act, was passed by Congress in 1980 to clean up the nation's
23 hazardous waste sites. In response to continuing community concern about hazardous
24 materials and chemical release tragedies such as the incident in Bohpal, India, a
25 reauthorization and expansion of Superfund was signed into law October 17, 1986. It is
26 known as the SARA. Title III of SARA created a new nationwide program known as the
27 Emergency Planning and Community Right-to-Know Act (EPCRA).”

28

29

30 **Variance** means a grant of relief from the requirements of this ordinance which permits
31 construction in a manner that would otherwise be prohibited by this ordinance.

32

33 **Velocity water** means water moving at high velocity in association with coastal storm
34 surge and wave action within V-zones.

35

36 **Vertical datum** means a zero surface from which elevations or heights are referred.
37 Prior to establishing a national vertical standard datum many communities created their
38 own vertical datum. The original FIRMs prepared by FEMA were based on the
39 “National Vertical Datum of 1929” (NGVD 1929), formerly known as “Sea Level Datum
40 of 1929”. The current national datum is the “North American Vertical Datum of 1988”
41 (NAVD 1988). Collier County FIRMs prepared by FEMA with an effective date of
42 November 17, 2005 are based upon NAVD 1988 with the equivalent NGVD 1929 data.

43

1 **Violation** means the failure of a structure or other development to be fully compliant
2 with Collier County's flood plain management regulations. A structure or other
3 development without the elevation certificate, other certifications, or other evidence of
4 compliance required in this ordinance is presumed to be in violation until such time as the
5 documentation is provided.

6
7 **V-zone** means any type of SFHA flood zone designation that begins with the letter “V”.
8 V -Zones are velocity zones where velocity flow and wave height of three feet (3’) or
9 greater is anticipated to occur during a base flood event. It is not intended to refer to only
10 the specific designation of Zone V that does not have an established base flood elevation.

11
12 **Watercourse** means a lake, river, creek, stream, canal, wash, channel, slough, flowway
13 or other topographic feature within, on, or over which waters flow at least periodically.
14 Watercourse includes specifically designated areas in which substantial flood damage
15 may occur.

16
17 **Water surface elevation** means the height, in relation to the NAVD or the NGVD of
18 floods of various magnitudes and frequencies in the flood plains of coastal or riverine
19 areas.

20
21
22 **SECTION 6: ACRONYMS**

23
24 BCC = Collier County Board of County Commissioners
25 BFE = Base Flood Elevation
26 CCCL = Coastal Construction Control Line
27 CRS = Community Rating System
28 EPA = Environmental Protection Agency
29 EPCRA = Emergency Planning and Community Right-to-Know Act
30 FEMA = Federal Emergency Management Agency
31 FIRM = Flood Insurance Rate Map
32 FIS = Flood Insurance Study
33 LDC = Collier County Land Development Code
34 LOMA = Letter of Map Amendment
35 LOMR = Letter of Map Revision
36 MSL = Mean Sea Level
37 NAVD = North American Vertical Datum
38 NFIP = National Flood Insurance Program
39 NGVD = National Geodetic Vertical Datum
40 SARA = Superfund Amendments and Reauthorization Act
41 SFHA = Special Flood Hazard Area

42
43
44 **SECTION 7: LANDS TO WHICH THIS ORDINANCE APPLIES**

1
2 This ordinance shall apply to all areas of unincorporated Collier County, including the
3 SFHA, within the jurisdiction of the BCC.
4

5
6 **SECTION 8: BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD**
7 **HAZARD**
8

9 Areas of special flood hazard as identified by FEMA in the *Flood Insurance Study for*
10 *Collier County, Florida, and Incorporated Areas*, dated November 17, 2005, with
11 accompanying FIRM, dated November 17, 2005, and any subsequent revisions thereto,
12 are adopted by reference and declared to be a part of this Ordinance. The FIS and
13 accompanying FIRM shall be on file and be open for public inspection at the Collier
14 County Community Development and Environmental Services Division, 2800 North
15 Horseshoe Drive, Naples, FL 34104, or other location as determined by the County
16 Manager.
17

18
19 **SECTION 9: DESIGNATION OF FLOODPLAIN ADMINISTRATOR**
20

- 21 (1) The County Manager or his designee shall administer and implement the provisions
22 of this ordinance. The Administrator of the Community Development and
23 Environmental Services Division, or successor, is the designated Floodplain
24 Administrator.
25
- 26 (2) Duties of the Floodplain Administrator shall include, but are not limited to:
27
- 28 (a) Implement and oversee all aspects of the NFIP as identified by this ordinance;
29
 - 30 (b) Review permits to assure sites are reasonably safe from flooding;
31
 - 32 (c) Review all development permits to assure that the permit requirements of this
33 ordinance have been satisfied;
34
 - 35 (d) Advise permittee that additional Federal, State of Florida, or local permits
36 may be required, and if such additional permits are necessary, especially as it
37 relates to Chapters 161.053; 320.8249; 320.8359; 373.036; 380.05; 381.0065,
38 and 553, Part IV, Florida Statutes, require that copies of such permits be
39 provided and maintained on file with the development permit;
40
 - 41 (e) Require the permittee to notify adjacent communities, the Florida Department
42 of Community Affairs, Florida Division of Emergency Management, the
43 South Florida Water Management District, the Federal Emergency
44 Management Agency and other Federal and/or State of Florida agencies with

- 1 statutory or regulatory authority prior to any capacity alteration or relocation
2 of a watercourse;
3
- 4 (f) Assure that maintenance is provided within the altered or relocated portion of
5 said watercourse so that the flood-carrying capacity is maintained;
6
- 7 (g) Verify and record the actual elevation, in relation to the NAVD, of the lowest
8 floor (Zones A, A1-A30, AE, AH, or AO) or bottom of the lowest horizontal
9 structural member of the lowest floor (Zones V, V1-V30, or VE) of all new or
10 substantially improved buildings, in accordance with Section 16(1) and (2),
11 Section 17(15) and (18), Section 18(1) and (2), and Section 19(2) of this
12 ordinance, respectively;
13
- 14 (h) Verify and record the actual elevation, in relation to the NAVD, to which the
15 new or substantially improved non-residential buildings have been
16 floodproofed, in accordance with Section 16(1) and (2), Section 17(15) and
17 (19), Section 18(2), and Section 19(2) of this ordinance;
18
- 19 (i) Review certified plans and specifications for compliance;
20
- 21 (j) Interpret the exact location of boundaries of the areas of special flood hazard.
22 When there appears to be a conflict between a mapped boundary and actual
23 field conditions, the Floodplain Administrator shall make the necessary
24 interpretation. The person contesting the location of the boundary shall be
25 given a reasonable opportunity to appeal the interpretation as provided in this
26 ordinance;
27
- 28 (k) When base flood elevation data or floodway data have not been provided in
29 accordance with Section 8 of this ordinance, the Floodplain Administrator
30 shall obtain, review and reasonably utilize any base flood elevation and
31 floodway data available from a Federal, State of Florida, or any other reliable
32 and properly documented source, in order to administer the provisions of this
33 ordinance;
34
- 35 (l) Coordinate all change requests to the FIS and FIRM with the requester, the
36 State of Florida, and FEMA, and
37
- 38 (m) Where base flood elevation is utilized, obtain and maintain records of lowest
39 floor and floodproofing elevations for new construction and substantial
40 improvements in accordance with this ordinance, and make provisions for
41 public records inspection.
42
43

44 **SECTION 10: DEVELOPMENT PERMIT REQUIRED**

1
2 A development permit shall conform to the provisions of this ordinance prior to the start
3 of development or construction activities.
4

5
6 **SECTION 11: COMPLIANCE**
7

8 No structure or land shall hereafter be located, extended, converted or structurally altered
9 without full compliance with the terms of this ordinance and applicable law and
10 regulations.
11

12
13 **SECTION 12: ABROGATION AND GREATER RESTRICTIONS**
14

15 This ordinance is not intended to repeal, abrogate, or impair any existing easements,
16 covenants, or deed restrictions. However, where this ordinance and another conflict or
17 overlap, the more stringent restrictions shall prevail.
18

19
20 **SECTION 13: INTERPRETATION**
21

22 In the interpretation and application of this ordinance all provisions shall be:
23

- 24 (1) considered as minimum requirements;
25
26 (2) liberally construed in favor of the BCC, and
27
28 (3) deemed neither to limit nor repeal any other powers granted under State of Florida
29 statutes.
30

31
32 **SECTION 14: WARNING AND DISCLAIMER OF LIABILITY**
33

34 The degree of flood protection required by this ordinance is considered reasonable for
35 regulatory purposes and is based on scientific and engineering consideration. Larger
36 floods can and will occur on rare occasions. Flood heights may be increased by man-
37 made or natural causes. This ordinance does not imply that land outside the areas of
38 special flood hazard or uses permitted within such areas will be free from flooding or
39 flood damages. This ordinance shall not create liability on the part of the BCC or by any
40 officer or employee thereof for any flood damages that result from reliance on this
41 ordinance or any administrative decision lawfully made thereunder.
42

43
44 **SECTION 15: PENALTIES FOR VIOLATION**

1
2 If any person, firm or corporation, whether public or private, or other entity fails or
3 refuses to obey or comply with or violates any of the provisions of this ordinance, such
4 person, firm, corporation or other entity, upon conviction of such offense, shall be guilty
5 of a misdemeanor and punished by a fine not to exceed Five Hundred Dollars (\$500.00)
6 or by imprisonment not to exceed Sixty (60) days in the County jail, or both, in the
7 discretion of the Court (Chapter 125.69 Florida Statute). Each violation or non-
8 compliance shall be considered a separate and distinct offense. Each day of continued
9 violation or non-compliance shall be considered as a separate offense.

10
11 Nothing herein contained shall prevent or restrict the County from taking such other
12 lawful action in any court of competent jurisdiction as is necessary to prevent or remedy
13 any violation or non-compliance. Such other lawful actions shall include, but shall not be
14 limited to, an equitable action for injunctive relief or an action at law for damages.
15 Nothing in this section shall be construed to prohibit the County from prosecuting any
16 violation of this ordinance by means of a Code Enforcement Board or Special Magistrate
17 established pursuant to the authority of Chapter 162, Florida Statutes.

18
19 All remedies and penalties provided for in this section shall be cumulative and
20 independently available to the County, and the County shall be authorized to pursue any
21 and all remedies set forth in this Section to the full extent allowed by law.

22
23

24 **SECTION 16: PERMIT APPLICATION PROCEDURES**

25

26 Application for a Development Permit shall be made on forms provided by the
27 Floodplain Administrator prior to any development activities, and may include, but not be
28 limited to, the construction plans drawn to scale showing the nature, location,
29 dimensions, and elevations of the area in question; existing or proposed structures,
30 earthen fill, storage of materials or equipment, drainage facilities, and their location.
31 Specifically, the following information is required:

32

33 (1) Application Stage:

34

35 (a) Elevation in relation to the NAVD of the proposed lowest floor (including
36 basement) of all buildings;

37

38 (b) Elevation in relation to the NAVD to which any non-residential building will
39 be flood-proofed;

40

41 (c) Certification from a registered professional engineer or registered professional
42 architect that the non-residential flood-proofed building will meet the flood-
43 proofing criteria required by this ordinance;

44

- 1 (d) Description of the extent to which any watercourse will be altered or relocated
2 as a result of proposed development; and
3
- 4 (e) Elevation in relation to the NAVD of the bottom of the lowest horizontal
5 structural member of the lowest floor and provide a properly signed and
6 sealed certification from a registered professional engineer or registered
7 professional architect indicating that they have developed and/or reviewed the
8 structural designs, specifications and plans of the construction and that these
9 items comply with accepted standards of practice in coastal high hazard
10 areas.
11
- 12 (f) Location and NAVD elevation of a temporary bench mark on site, established
13 by a registered professional land surveyor or professional surveyor and
14 mapper, that will remain until the final certificate of occupancy has been
15 issued.
16
- 17 (2) Construction Stage:
18
- 19 (a) Upon placement of the lowest floor, or floodproofing by whatever
20 construction means, or bottom of the lowest horizontal structural member it
21 shall be the duty of the permit holder to submit, within ten (10) calendar days,
22 to the Floodplain Administrator a certification of the NAVD elevation of the
23 lowest floor or floodproofed elevation, or bottom of the lowest horizontal
24 structural member as built, in relation to mean seal level. Said certification
25 shall be prepared by, or under the direct supervision of, a registered
26 professional land surveyor or professional surveyor and mapper and certified
27 by same.
28
- 29 (b) When floodproofing is utilized for a particular building, said certification of
30 the installation of the floodproofing shall be prepared by, or under the direct
31 supervision of, a registered professional engineer or registered professional
32 architect and certified by same.
33
- 34 (c) Any additional work undertaken within the ten (10) calendar day period
35 and/or prior to submission of the certification shall be at the permit holder's
36 risk. The Floodplain Administrator shall review the lowest floor and
37 floodproofing elevation survey data submitted for conformance. The permit
38 holder, immediately, and prior to further progressive work being permitted to
39 proceed, shall correct deficiencies and/or violations detected by such review.
40 Failure to submit the survey or failure to make required corrections, shall be
41 cause to issue a stop-work order for the project.
42
- 43 (d) Prior to the issuance of a final certificate of occupancy, the applicant shall
44 furnish the Floodplain Administrator with the following:

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- (i) A signed and sealed certification by a registered professional land surveyor or professional surveyor and mapper that the finished structure meets the minimum base flood elevation (plus any freeboard as may be required by this ordinance) indicated on the effective FIRM or FISAs issued by FEMA; and
- (ii) A signed and sealed certification by a registered professional engineer or registered professional architect that the construction of all foundation walls, shear walls, posts, piers, columns, pilings, breakaway walls, equalization vents, and required floodproofing are in compliance with this ordinance.

(3) Dispute Resolution Procedure

Periodically, disputes may arise over procedures in this ordinance. In those cases, permit applicants may appeal staff decisions to the Floodplain Administrator before they rise to the level of Appeals to the Board of Zoning Appeals as described in Section 26 of this ordinance. There is no separate, or additional, application fee for this internal level of dispute resolution. The Floodplain Administrator will utilize an appropriate method to obtain a full understanding of the issue(s) with the applicant and staff before making a determination. That determination will be provided in writing to the applicant and a copy included in the application file.

SECTION 17: GENERAL STANDARDS FOR FLOOD HAZARD REDUCTION

In all areas of unincorporated Collier County, including the SFHA, all development sites including new construction and substantial improvements shall be reasonably safe from flooding, and meet the following provisions:

- (1) New construction and substantial improvements shall be designed or modified and adequately anchored to prevent flotation, collapse or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy;
- (2) Manufactured homes shall be anchored to prevent flotation, collapse, or lateral movement pursuant to the Florida Building Code. Mobile homes shall be anchored in accordance with the manufacturer’s installation instructions to prevent flotation, collapse, or lateral movement as tested, listed and approved by the Florida Department of Highway Safety and Motor Vehicles, Bureau of Mobile Home and Recreational Vehicle Construction. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. This standard shall be in addition to and consistent with applicable State of Florida requirements for resisting wind forces;

- 1
- 2 (3) New construction and substantial improvements shall be constructed with materials
- 3 and utility equipment resistant to flood damage. See applicable FEMA Technical
- 4 Bulletin or Bulletins for guidance;
- 5
- 6 (4) New construction or substantial improvements shall be constructed by methods and
- 7 practices that minimize flood damage. See applicable FEMA Technical Bulletin or
- 8 Bulletins for approved methods and practices;
- 9
- 10 (5) Electrical, heating, ventilation, plumbing, air conditioning equipment and other
- 11 service facilities, including duct work, shall be designed and/or located to prevent
- 12 water from entering or accumulating within the components or causing damage to
- 13 the components during conditions of flooding;
- 14
- 15 (6) New and replacement water supply systems shall be designed to minimize or
- 16 eliminate infiltration of flood waters into the system;
- 17
- 18 (7) New and replacement sanitary sewage collection/transmission systems shall be
- 19 designed to minimize or eliminate infiltration of flood waters into the systems and
- 20 discharges from the systems into flood waters;
- 21
- 22 (8) On-site waste sewage treatment and disposal systems shall be located and
- 23 constructed to avoid impairment to them or contamination from them during
- 24 flooding;
- 25
- 26 (9) All meter enclosures for self-contained electric kilowatt hour meters serving
- 27 buildings shall be located no lower than one (1) foot above the base flood elevation,
- 28 depth of flooding, or other identified flood level indicator. If complying with this
- 29 regulation results in a vertical distance from finished grade to the center of the
- 30 meter or meters of more than six (6) feet, the meter enclosure shall be located on the
- 31 outside of an exterior wall with an unobstructed and ready access from an open
- 32 exterior stairway. When it is necessary to use a stairway for access to a meter, the
- 33 vertical distance from the tread of the stairway to the center of the meter shall be
- 34 four (4) to six (6) feet. The meter shall be placed in a position that will not obstruct
- 35 stairway traffic. On multi-unit buildings, meters and meter enclosures will be
- 36 allowed in a meter room inside the building provided they are no lower than one (1)
- 37 foot above the base flood elevation, depth of flooding, or other identified flood level
- 38 indicator;
- 39
- 40 (10) Any alteration, repair, reconstruction or improvements to a building that is in
- 41 compliance with the provisions of this ordinance shall meet the requirements of
- 42 “new construction” as defined in this ordinance;
- 43

- 1 (11) Any alteration, repair, reconstruction or improvements to a building not in
2 compliance with the provisions of this ordinance, shall be undertaken only if said
3 non-conformity is not furthered, extended, or replaced;
4
- 5 (12) All applicable additional Federal, State, and local permits shall be obtained and
6 submitted to the Floodplain Administrator. Copies of such permits shall be
7 maintained on file with the approved development permit. State permits may
8 include, but not be limited to the following:
9
- 10 (a) South Florida Water Management District: in accordance with Chapter
11 373.036 Florida Statutes, Section (2)(a) – Flood Protection and Floodplain
12 Management.
13
- 14 (b) Department of Community Affairs: in accordance with Chapter 380.05 F.S.
15 Areas of Critical State Concern, and Chapter 553, Part IV F.S., Florida
16 Building Code.
17
- 18 (c) Department of Health: in accordance with Chapter 381.0065 F.S. Onsite
19 Sewage Treatment and Disposal Systems.
20
- 21 (d) Department of Environmental Protection, CCCL: in accordance with Chapter
22 161.053 Florida Statute Coastal Construction and Excavation.
23
- 24 (13) Standards for Subdivision Proposals and other Proposed Development (including
25 manufactured homes):
26
- 27 (a) All subdivision proposals shall be consistent with the need to minimize flood
28 damage;
29
- 30 (b) All subdivision proposals shall have public utilities and facilities such as
31 sewer, gas, electrical, and water systems located and constructed to minimize
32 or eliminate flood damage;
33
- 34 (c) All subdivision proposals shall have adequate drainage provided to reduce
35 exposure to flood hazards.
36
- 37 (14) Elevation Standards
38
- 39 (a) Elevation within A Zones may be achieved by the placement of the building
40 on properly designed and compacted fill (ASTM D-698 or equivalent) that
41 extends at least three (3) feet beyond the building walls before dropping below
42 the base flood elevation and has appropriate protection from erosion and
43 scour.
44

- 1 (b) Elevation within A Zones may be achieved by use of stemwall construction
2 with the interior portion of the stemwall being backfilled with a properly
3 designed and compacted fill (ASTM D-698 or equivalent in compliance with
4 the Collier County Building Code ordinance). Additional fill for aesthetic or
5 landscaping purposes may be placed outside of the stemwall with appropriate
6 protection from erosion and scour.
7
- 8 (c) Elevation within A Zones may be achieved by use of solid foundation
9 perimeter walls, shear walls, posts, piers, columns, or pilings. Should solid
10 foundation perimeter walls be used to elevate a structure, openings sufficient
11 to facilitate automatic equalization of flood hydrostatic forces on both sides of
12 the exterior walls shall be provided in accordance with standards of Section
13 18(3). Fill for aesthetic or landscaping purposes adjacent to the building may
14 be placed on the property with appropriate protection from erosion and scour.
15
- 16 (d) Where fill is placed on a property, the total volume of fill placement within
17 the riverine floodplain (except for the minimum amount required to construct
18 a septic tank, drainfield, and single lane driveway, if applicable) must be
19 compensated by the establishment of an equivalent amount of available
20 floodwater storage (between the wet season water table and the base flood
21 elevation) within the same riverine floodplain drainage basin and within
22 reasonable proximity as determined by the Floodplain Administrator.
23
- 24 (e) Elevation within V Zones may be achieved by use of foundation walls, shear
25 walls, posts, piers, columns, or pilings so that no obstruction to the passage of
26 waves and high velocity water is created. Elevation within V Zones must be
27 achieved in accordance with Section 20 of this ordinance.
28
- 29 (15) A minimum of one foot (1') of freeboard is required for the lowest floor or lowest
30 horizontal structural member of the lowest floor, electrical, heating, ventilation,
31 plumbing, air conditioning equipment and other service facilities, including duct
32 work. The freeboard requirement is generally included in subsequent subsections
33 of this ordinance, but is an overall requirement whether or not specifically
34 mentioned elsewhere. Freeboard is added to the base flood elevation, identified
35 flooding depth, estimated flood elevation (for Zone A), and South Florida Water
36 Management District 100-year/zero discharge elevation, whichever is applicable.
37
- 38 (16) Development utilizing a designed stormwater management system to contain the
39 runoff and discharge through a control structure shall be designed to meet or exceed
40 the minimum water quantity and quality requirements established by the South
41 Florida Water Management District, or the LDC, whichever is applicable and more
42 restrictive.
43

- 1 (17) Adequate drainage facilities around structures shall be provided on slopes to guide
2 water away from structures. No significant stormwater drainage is permitted to
3 flow from the subject premises onto abutting properties or into adjoining waters that
4 are not County-approved drainage systems.
5
- 6 (18) Residential Construction – New construction or substantial improvement of any
7 residential structure shall have the lowest floor, elevated to or above the base flood
8 elevation, plus any required freeboard.
9
- 10 (19) Non-residential Construction – New construction and substantial improvements of
11 non-residential structures shall, (i) have the lowest floor (including basement)
12 elevated to or above the base flood level plus any required freeboard or (ii) together
13 with the attendant utility and sanitary facilities, be designed so that below the base
14 flood level, plus one (1) foot plus any required freeboard, the structure is essentially
15 waterproofed with walls substantially impermeable to the passage of water and with
16 structural components having the capability of resisting hydrostatic and
17 hydrodynamic loads and effects of buoyancy. Floodproofing is prohibited in the
18 velocity (V) zones.
19
- 20 (20) Emergency generators for standpipe systems in accordance with the requirements of
21 the Collier County Building Code or other applicable Collier County ordinances
22 must be located at least one (1) foot above the base flood elevation level. Generator
23 fuel tanks must be waterproofed and vented at least one (1) foot above the base
24 flood elevation level.
25
- 26 (21) Within the special flood hazard areas, in riverine-type situations, require the
27 permittee to notify adjacent communities, the Florida Department of Community
28 Affairs, NFIP Coordinating Office, and the South Florida Water Management
29 District prior to any alteration or relocation of a watercourse, and submit copies of
30 such notifications to FEMA and the Floodplain Administrator. Assure that the
31 flood carrying capacity within the altered or relocated portion of any watercourse is
32 maintained.
33
34

35 **SECTION 18: SPECIFIC STANDARDS FOR A-ZONES WITH BASE FLOOD**
36 **ELEVATIONS AND WITHOUT REGULATORY FLOODWAYS.**
37

38 In all A-Zones where base flood elevation data has been provided (Zones AE, A1–30,
39 and AH), as set forth in Section 8 the following provisions shall apply:
40

41 (1) Residential Construction
42

43 All new construction or substantial improvement of any residential building
44 (including manufactured home) shall have the lowest floor, including basement,

1 electrical, heating, ventilation, plumbing, air conditioning equipment and other
2 service facilities, including duct work, and air conditioned space elevated to no
3 lower than one foot above the base flood elevation. Where solid foundation
4 perimeter walls are used to elevate a structure, openings sufficient to facilitate
5 automatic equalization of flood hydrostatic forces on both sides of the exterior walls
6 shall be provided in accordance with standards of Section 18(3). Where stem wall
7 construction is utilized and the interior area of the stem wall is filled with
8 compacted fill able to resist flood hydrostatic forces on the exterior of the stem
9 wall, openings to allow automatic equalization of flood hydrostatic forces are not
10 required.

11
12 (2) Non-Residential Construction

13
14 All new construction or substantial improvement of any commercial, industrial, or
15 non-residential building (including manufactured home) shall have the lowest floor,
16 including basement, electrical, heating, ventilation, plumbing, air conditioning
17 equipment and other service facilities, including duct work, and air conditioned
18 space elevated to no lower than one foot above the base flood elevation. Where
19 solid foundation perimeter walls are used to elevate a structure, openings sufficient
20 to facilitate automatic equalization of flood hydrostatic forces on both sides of the
21 exterior walls shall be provided in accordance with standards of Section 18(3).
22 Where stem wall construction is utilized and the interior area of the stem wall is
23 filled with compacted fill able to resist flood hydrostatic forces on the exterior of
24 the stem wall, openings to allow automatic equalization of flood hydrostatic forces
25 are not required.

26
27 If sufficient information is provided to the Floodplain Administrator to clearly
28 demonstrate the unique site limitations that pose a hardship in meeting the
29 minimum elevation requirements, and the Floodplain Administrator agrees with this
30 information, non-residential buildings located in A-Zones may be dry flood-
31 proofed, in lieu of being elevated, provided that all areas of the building
32 components below the base flood elevation plus one (1) foot, plus any required
33 freeboard (other than areas used solely for parking, access or storage), are
34 floodproofed.

35
36 Additionally, for certain “open” non-residential buildings (e.g. car wash) where
37 there is not a total enclosure of the building area, wet floodproofing is allowable
38 provided that the wet floodproofing extends to no lower than one foot above the
39 base flood elevation, plus any required freeboard.

40
41 A registered professional engineer or registered professional architect shall certify
42 that the standards of this subsection are satisfied using the FEMA Floodproofing
43 Certificate. Such certification along with the corresponding engineering data, and

1 the operational and maintenance plans shall be provided to the Floodplain
2 Administrator.

3
4 (3) Elevated Buildings

5
6 New construction or substantial improvements of elevated buildings that include
7 fully enclosed areas formed by foundation and other exterior walls below the lowest
8 floor elevation shall be designed to preclude finished living and/or air conditioned
9 space and designed to allow for the entry and exit of floodwaters to automatically
10 equalize hydrostatic flood forces on exterior walls.

11
12 (a) Designs for complying with this requirement must be certified by a registered
13 professional engineer or registered professional architect and meet the
14 following minimum criteria:

15
16 (i) Provide a minimum of two openings, both of which may not be on the
17 same exterior wall, having a total net area of not less than one square
18 inch for every square foot of enclosed area subject to flooding;

19
20 (ii) The bottom of all openings shall be no higher than one foot above the
21 foundation adjacent exterior grade; and

22
23 (iii) Openings may be equipped with screens, louvers, valves, or other
24 coverings or devices provided they meet the required net area of the
25 openings and permit automatic flow of floodwaters in both directions.

26
27 (b) Fully enclosed areas below the lowest floor shall solely be used for parking of
28 vehicles, storage, and building access and constructed of materials able to
29 withstand submergence, without damage, for prolonged periods of time.
30 Access to the enclosed area shall be the minimum necessary to allow for
31 parking of vehicles (garage door), limited storage of maintenance equipment
32 used in connection with the premises (standard exterior door), or entry to the
33 living area (stairway or elevator); and

34
35 (c) The interior portion of such enclosed area shall not be finished, partitioned
36 into separate rooms or air conditioned. Any electrical, heating, ventilation,
37 plumbing, air conditioning equipment and other service facilities, including
38 duct work, shall be located no lower than one foot above the base flood
39 elevation unless designed to withstand fully submerged conditions for
40 prolonged periods of time or enclosed in waterproof housings designed for
41 fully submerged conditions at a depth equal or greater than the hydrostatic
42 load created by flooding.

43
44 (4) Manufactured Homes and Recreational Vehicles

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(a) Manufactured homes that are placed, or substantially improved, within Zones A1-30, AH, and AE, on sites:

- (i) outside of an existing manufactured home park or subdivision,
- (ii) in a new manufactured home park or subdivision,
- (iii) in an expansion to an existing manufactured home park or subdivision, or
- (iv) in an existing manufactured home park or subdivision on which a manufactured home has incurred “substantial damage” as the result of a flood,

shall be elevated on and securely anchored to a permanent foundation system so that the lowest floor and all air conditioned space, electrical, heating, ventilation, plumbing, air conditioning equipment and other service facilities, including duct work, are no lower than one foot above the base flood elevation. The permanent foundation system must be able to withstand flotation, collapse, and lateral movement.

(b) Manufactured homes to be placed or substantially improved in an existing manufactured home park or subdivision within Zones A1-30, AH, and AE, that are not subject to the provisions of Section 18(4)(a), must be elevated so that:

- (i) The lowest floor and all air conditioned space, electrical, heating, ventilation, plumbing, air conditioning equipment and other service facilities, including duct work, of the manufactured home is elevated to no lower than one foot above the base flood elevation, and
- (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 withstand flotation, collapse, and lateral movement.

(c) All recreational vehicles placed on sites within Zones A1-30, AH, and AE must either:

- (i) Be on the site for fewer than 180 consecutive days and,
- (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

1 and has no permanently attached additions), with a plan for removal in
2 case of a flooding threat, or
3

4 (iii) If not able to comply with items (i) and (ii), meet all the requirements for
5 new construction, including anchoring and elevation requirements in
6 accordance with Section 18(4)(a) and (4)(b) of this ordinance.
7

8 (5) Site Drainage
9

10 Adequate drainage facilities around structures shall be provided on slopes to guide
11 water away from structures. No significant stormwater drainage is permitted to
12 flow from the subject premises onto abutting properties or into adjoining waters that
13 are not County-approved drainage systems. Within Zones AH and AO, adequate
14 drainage paths around structures, and around or through developments, must be
15 provided to guide floodwaters around and away from proposed and existing
16 structures without an increase in the base flood elevation or depth.
17

18 | (6) Non-coastal Zone AE Areas with established BFE and no identified regulatory
19 floodways
20

21 Located within the SFHA established in Section 8 where non-coastal Zone AE
22 areas exist for which base flood elevation data has been provided by FEMA without
23 the delineation of the regulatory floodway, the following additional provisions shall
24 also apply.
25

26 (a) Until regulatory floodways are designated, no new construction, substantial
27 improvements, or other development, including fill, shall be permitted within
28 the SFHA, unless it is demonstrated that the cumulative effect of the proposed
29 development, when combined with all other existing and anticipated
30 development, will not increase the water surface elevation of the base flood
31 more than one foot at any point within the community.
32

33 (b) Development activities which, when combined with all other existing and
34 anticipated development, propose to increase the water surface elevation of
35 the base flood by more than one foot may be allowed, provided that the
36 developer or applicant first applies – with the community’s endorsement – for
37 a conditional FIRM revision, and receives the approval of FEMA.
38
39

40 (7) Structures Located Seaward of the Coastal Construction Control Line
41

42 For all structures located seaward of the CCCL, the lowest floor, electrical, heating,
43 ventilation, plumbing, air conditioning equipment and other service facilities,
44 including duct work, of all new construction and substantial improvements shall be

1 elevated to the regulatory flood elevation established by the Florida Department of
2 Environmental Protection or at least one (1) foot above the BFE established by
3 FEMA in accordance with Section 8, whichever is higher. All non-elevation design
4 requirements of Section 20 shall apply.
5

6
7 **SECTION 19: SPECIFIC STANDARDS FOR A-ZONES WITHOUT BASE**
8 **FLOOD ELEVATIONS AND REGULATORY FLOODWAYS.**
9

10 Located within the areas of special flood hazard established in Section 8, may be A Zones
11 for which no BFE data and regulatory floodways have been provided or designated by
12 FEMA, and the following provisions apply:
13

- 14 (1) Require standards of Section 17.
15
16 (2) The Floodplain Administrator shall review and reasonably utilize the BFE and
17 floodway data available from a Federal, State of Florida, or any other reliable and
18 properly documented source, in order to administer the provisions of this
19 ordinance. When such data is utilized, provisions of Section 18 shall apply. The
20 Floodplain Administrator shall:
21
22 (a) Obtain the NAVD elevation (in relation to the MSL) of the lowest floor and
23 all air conditioned space, including the basement, electrical, heating,
24 ventilation, plumbing, air conditioning equipment and other service facilities,
25 including duct work, of all new and substantially improved structures,
26
27 (b) Obtain, if the structure has been floodproofed in accordance with the
28 requirements of Section 18(2), the NAVD elevation in relation to the MSL to
29 which the structure has been floodproofed, and
30
31 (c) Maintain a record of all such information.
32
33
34 (3) Manufactured homes shall be installed using methods and practices that minimize
35 flood damage and shall be elevated on and securely anchored to a permanent
36 foundation system so that the lowest floor and all air conditioned space, electrical,
37 heating, ventilation, plumbing, air conditioning equipment and other service
38 facilities, including duct work, are no lower than one foot above the elevation
39 established in Section 19(2). The permanent foundation system must be able to
40 withstand flotation, collapse, and lateral movement. Methods of anchoring may
41 include, but are not limited to, use of over-the-top or frame ties to ground anchors.
42 This requirement is in addition to applicable State of Florida and local anchoring
43 requirements for resisting wind forces.
44

- 1 (4) When the data is not available from any source as in Section 19(2), the lowest
2 floor and all air conditioned space, including basement, electrical, heating,
3 ventilation, plumbing, air conditioning equipment and other service facilities,
4 including duct work, of the structure shall be elevated to no lower than four (4)
5 feet above the highest adjacent grade unless on-site or nearby seasonal water level
6 indicators establish that the high wet season water elevations are higher than the
7 highest adjacent grade. In that situation, the structure's elevation requirements
8 shall be measured from the high wet season water elevation.
9
- 10 (5) Require that all new subdivision proposals and other proposed developments
11 (including proposals for manufactured home parks and subdivisions) greater than
12 50 lots or 5 acres, whichever is the lesser, include within such proposals base
13 flood elevation data.
14
15
16

17 **SECTION 20: SPECIFIC STANDARDS FOR COASTAL HIGH HAZARD**
18 **AREAS (V-ZONES).**
19

20 Located within the SFHA established in Section 7 are Coastal High Hazard Areas,
21 designated as Zones V1–30 or VE withBFE. These areas have special flood hazards
22 associated with high velocity waters from tidal surge and hurricane wave wash. The
23 following provisions shall apply for all development activities within the Coastal High
24 Hazard Areas (V-zones):
25

- 26 | (1) Meet the Requirements of Section 16 and Section 17 [except 17(2) and 17(14 a-d)].
27
- 28 (2) All new construction and substantial improvements in Zones V1–V30 and VE shall
29 be elevated on shear walls, posts, piers, pilings or columns so that:
30
- 31 (a) The bottom of the lowest horizontal structural member of the lowest floor and
32 all air conditioned space (excluding the shear walls, posts, piers, pilings or
33 columns) electrical, heating, ventilation, plumbing, air conditioning
34 equipment and other service facilities, including duct work is elevated to no
35 lower than one foot above the BFE whether or not the structure contains a
36 basement; and
37
- 38 (b) The shear wall, post, pier, pile or column foundation and structure attached
39 thereto is anchored to resist flotation, collapse, and lateral movement due to
40 the effects of wind and water loads acting simultaneously on all building
41 components. Water loading will be those values associated with one foot
42 above the base flood. Wind loading values will be those required by
43 applicable State of Florida or local, if more stringent than those of the State of
44 Florida, building standards. Utility service risers shall be located and

1 designed for protection against wind, water, waves and debris impacts
2 anticipated with the base flood.
3

4 (3) A registered professional engineer or registered professional architect shall develop
5 or review the structural design, specifications and plans for the construction, and
6 shall certify that the design and methods of construction to be used are in
7 accordance with accepted standards of practice for meeting the provisions of this
8 Section.
9

10 (4) Obtain the NAVD elevation of the bottom of the lowest horizontal structural
11 member of the lowest floor (excluding shear walls, posts, piers, pilings and
12 columns) of all new and substantially improved structures. The Floodplain
13 Administrator shall maintain a record of all such information.
14

15 (5) All new construction and substantial improvements shall be located landward of the
16 reach of mean high tide.
17

18 (6) Provide that all new construction and substantial improvements have the space
19 below the lowest floor either free of obstruction or constructed with non-supporting
20 breakaway walls, open wood lattice-work, or insect screening intended to collapse
21 under wind and water loads without causing collapse, displacement, or other
22 structural damage to the elevated portion of the building or supporting foundation
23 system. For the purpose of this section, a breakaway wall shall have a design safe
24 loading resistance of not less than ten (10) and no more than twenty (20) pounds per
25 square foot. Use of breakaway walls which exceed a design safe loading resistance
26 of twenty (20) pounds per square foot (either by design or when so required by local
27 codes) may be permitted only if a registered professional engineer or registered
28 professional architect certifies that the designs proposed meet the following
29 conditions:
30

31 (a) Breakaway wall collapse shall result from water load less than that which
32 would occur during the base flood; and
33

34 (b) The elevated portion of the building and supporting foundation system shall
35 not be subject to collapse, displacement, or other structural damage due to the
36 effects of wind and water loads acting simultaneously on all building
37 components (structural and nonstructural). The water loading shall be those
38 values associated with one (1) foot above the base flood. The wind loading
39 values shall be those required by applicable Florida or local, if more stringent
40 than those of the State of Florida, building standards.
41

42 Such enclosed space shall be useable solely for parking of vehicles, building access,
43 or storage and shall not be finished, partitioned into multiple rooms, or temperature-
44 controlled (air conditioned).

- 1
2 (7) Prohibit the use of fill for structural support. No development permit shall be
3 issued for development involving fill in Coastal High Hazard Areas unless it has
4 been demonstrated through appropriate engineering analyses that the subject fill
5 does not cause any adverse impacts to the structure on site or adjacent structures.
6 Placement of fill that could result in an increase in the BFE or cause adverse
7 impacts by wave ramping and deflection may be permitted, provided that the permit
8 applicant first applies for and receives a conditional FIRM revision, fulfilling the
9 requirements for such revisions as established by FEMA.
10
11 (8) All swimming pools within the Coastal High Hazard Area, as defined by this
12 ordinance, shall be anchored to a shear wall, post, pier, pile or column foundation to
13 resist flotation, collapse and lateral movement due to the effects of wind and water
14 loads acting simultaneously on the pool. An exception to this is for above ground
15 pools for the private use of a one or two family dwelling that is constructed with a
16 vinyl liner as the main component.
17
18 (9) Prohibit man-made alteration of sand dunes and mangrove stands that would
19 increase potential flood damage.
20
21 (10) Standards for Manufactured Homes
22
23 (a) No manufactured home shall be placed in the Coastal High Hazard Area
24 except in an existing manufactured home park or existing manufactured home
25 subdivision.
26
27 (b) All manufactured homes to be placed or substantially improved on sites in the
28 Coastal High Hazard Area:
29
30 (i) In an expansion to an existing manufactured home park or subdivision,
31 or,
32
33 (ii) In an existing manufactured home park or subdivision in which a
34 manufactured home has incurred “substantial damage” as the result of a
35 flood, must meet the standards of Section 20(2) though (9),
36
37 (c) All manufactured homes placed or substantially improved on other sites in an
38 existing manufactured home park or subdivision shall meet the requirements
39 of Section 18(4) (b).
40
41 (11) Recreational vehicles placed on sites within Zones VE, V1–V30, or V (withBFE)
42 on the FIRM must be within an existing recreational vehicle park or recreational
43 vehicle subdivision and either
44

- 1 (a) Be on the site for fewer than 180 consecutive days, and
2
3 (b) Be fully licensed and ready for highway use (on its wheels or jacking system,
4 is attached to the site only by quick disconnect type utilities and security
5 devices, and has no permanently attached additions) with a plan for removal
6 in case of a flooding threat; or
7
8 (c) Meet the requirements of Section 20(2) through (9).
9
- 10 (12) For all structures located seaward of the CCCL, the bottom of the lowest horizontal
11 structural member of the lowest floor of all new construction and substantial
12 improvements shall be elevated to the flood elevation established by the Florida
13 Department of Environmental Protection or at least one foot above theBFE,
14 whichever is the higher. All non-elevation design requirements of Section 20(2)
15 through (11) shall apply.
16
- 17 (13) When fill is proposed, in accordance with the permit issued by the Florida
18 Department of Health, in a Coastal High Hazard Area, the development permit shall
19 be issued only upon demonstration by appropriate engineering analyses that the
20 proposed fill will not be subject to damage and erosion by the base flood, nor
21 increase the water surface elevation of the base flood, nor cause any adverse
22 impacts to adjacent properties by wave ramping and deflection.
23
24
25

26 **SECTION 21: SPECIFIC STANDARDS FOR REPETITIVE LOSS PROPERTIES**
27

- 28 (1) “Repetitive loss properties” and “severe repetitive loss properties” are identified by
29 FEMA, and that information is provided to Collier County through participation in
30 the CRS program.
31
- 32 (2) The threshold for determination of substantial damage or substantial improvement
33 for “repetitive loss properties” is lowered to forty (40) percent of the market value
34 of the structure before the damage or improvement.
35
- 36 (3) The threshold for determination of substantial damage or substantial improvement
37 for “severe repetitive loss properties” is lowered to twenty-five (25) percent of the
38 market value of the structure before the damage or improvement.
39
- 40 (4) The Floodplain Administrator may assist willing owners of repetitive loss
41 properties or severe repetitive loss properties in preparing funding assistance and
42 grant applications to FEMA. The type and amount of assistance provided will be
43 determined on a case by case basis as a result of a public petition request before the
44 BCC.

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SECTION 22: SPECIFIC STANDARDS FOR SUBDIVISION PLATS

- (1) All subdivision plats shall be designed to minimize flood damage.
- (2) All subdivision plats shall have public utilities and facilities (e.g. sewer, gas, electrical and water systems) located and constructed to minimize flood damage.
- (3) All subdivision plats shall have adequate drainage to reduce exposure to flood hazards.
- (4) BFE data and all SFHA (flood zones beginning with “A” or “V”) shall be shown on the master subdivision plan.
- (5) All final plats presented to the Floodplain Administrator for approval shall clearly indicate SFHA, the minimum elevation of roads, the minimum elevation of lots or home sites, and the minimum BFE as required in this ordinance. All elevations shall be based upon the NAVD.

SECTION 23: SPECIFIC STANDARDS FOR CRITICAL FACILITIES

- (1) Certain public and privately owned facilities are considered critical facilities when considering the health, safety, and welfare of the citizens and residents of Collier County, Florida. Critical facilities require flood protection to a greater extent than most properties to reduce damage to these vital facilities, reduce pollution of flood waters by potentially hazardous materials, and ensure that the facilities will be operable during flood emergencies.
- (2) New, substantially improved, reconstructed, and substantially damaged/repairs critical facilities shall be protected from flooding up to the 0.02 annual percent chance (500-year) flood event plus one foot (1’) of freeboard, or if the 0.02 annual percent chance flood elevation is not known, at least two feet (2’) above the BFE, depth of flooding, or any other flood elevation data available from a Federal, State of Florida, or any other reliable and properly documented source.
- (3) New critical facilities must use elevation as the method of providing the required level of flood protection. Substantially improved, reconstructed, and substantially damaged/repairs critical facilities may use dry floodproofing as an acceptable method of providing the required level of flood protection when elevation is not a practical or fiscally sound option.

SECTION 24: SPECIFIC STANDARDS FOR PERIODIC INSPECTION, AND TRAINING FOR INSTALLATION OF DRY FLOODPROOFING COMPONENTS

- (1) Dry floodproofing a nonresidential structure requires the timely installation (within four hours) of sealants, flood panels, and possibly other components to prevent flood waters from entering. The periodic inspection of the components, training of structure occupants in the proper installation, and testing of components to ensure their continued suitability is necessary to ensure the viability of the dry floodproofing.
- (2) The components of an approved dry floodproofing system shall be located on the premises and available for immediate installation at all times.
- (3) Annual visual inspections and installation training
 - (a) The owner, or legally responsible entity, of a structure approved for dry floodproofing is responsible to ensure that a visual inspection is made of all the components required to dry floodproof the structure, including the structure itself,
 - (i) at least once each year, but no later than May 31st of that year.
 - (ii) The visual inspection shall include an examination of all components to check for
 - storage and availability for implementation,
 - access to all backflow prevention valves,
 - deterioration (e.g., rusting, pitting, rotting, dry rotting, etc.) of flood panels, gaskets, and door and window opening attachment areas,
 - freshness and useableness of any applied sealants,
 - and proper and sufficient fasteners (e.g., bolts, screws, etc.) and any special tools required to install the components.
 - (iii) If the visual inspection identifies needed repairs to, or replacement of, dry floodproofing components, the owner, or legally responsible entity, shall initiate the repair or replacement within two (2) weeks, and complete it within two (2) weeks of initiation of the repair or replacement unless a longer, but reasonable, time frame agreeable to the Floodplain Administrator is required.
 - (b) The owner, or legally responsible entity, of a structure approved for dry floodproofing is responsible to ensure that the occupants of the structure

- 1 receive training in the installation of all the components required to dry
2 floodproof the structure,
3
4 (i) at least once each year, but no later than May 31st of that year.
5
6 (ii) The installation training shall include all components and an explanation
7 of
8 • where they are installed,
9 • the proper order and way in which they are installed,
10 • the operation of any special tools required to install,
11 • and the proper disassembly and storage of the components after
12 flooding has receded.
13
14 (c) The owner, or legally responsible entity, of a structure approved for dry
15 floodproofing is responsible to maintain a record of the visual inspections and
16 installation training of the dry floodproofing components, and must provide a
17 copy of the record to the Floodplain Administrator if requested.
18 Documentation shall include, at a minimum, the date and time of the
19 inspection or training, a written statement of findings for each component of
20 the floodproofing system inspected, the name, address and telephone number
21 of the persons trained, and the name, address and telephone number of the
22 inspector. The inclusion of photos, while recommended, is optional.
23
24 (4) Practice installation of dry floodproofing components
25
26 (a) At least **once every 3 years** each owner, or legally responsible entity, of a
27 structure approved for dry floodproofing shall conduct a practice installation
28 of the floodproofing components as a part of the training program.
29
30 (b) Practice Installation Standard:
31
32 i. The owner, or legally responsible entity, of a structure approved for dry
33 floodproofing is responsible to maintain a record of the practice
34 installation training of the dry floodproofing components, and must
35 provide a copy of the record to the Floodplain Administrator if
36 requested.
37 ii. Documentation shall include, at a minimum, the date and time of the
38 practice installation, a written statement of findings for each component
39 of the floodproofing system installed, and the name, address and
40 telephone number of the persons involved in the practice installation.
41 iii. Floodproofing components must be installed within four (4) hours and
42 function as designed.
43 iv. The inclusion of photos, while recommended, is optional.
44

1
2 **SECTION 25: SPECIFIC STANDARDS FOR FLOOD HAZARD DISCLOSURE**
3

4 The National Flood Insurance Act of 1968, as amended, requires that a federally backed
5 lender advise a purchaser if a property is located in a SFHA and ensure that adequate
6 flood insurance is available for the life of the loan before closing on the loan. The
7 federally backed lender also has the ability to require the borrower to purchase and
8 maintain adequate amounts of flood insurance even if the property is located outside the
9 boundaries of the SFHA. The following flood hazard disclosure requirements are
10 required for all real estate transactions.

11
12 (1) All individual sellers (when a real estate broker representing the seller is not
13 involved) or real estate brokers representing sellers must notify those (or their real
14 estate agents) interested in purchasing properties located in the SFHA (flood zones
15 beginning with the letter “A” or “V”) about the flood hazard and the potential for
16 flood insurance purchase requirement.

17
18 (a) The notice must clearly state whether the property is in the SFHA and, if so,
19 that flood insurance purchase requirements are applicable.
20

21 (b) The flood hazard disclosure document must be provided to the potential
22 purchaser (or their agent) at the time of the initial face to face contact, initial
23 showing, or initial mailing of information (including electronic mail and
24 facsimile transmissions) but is not required when the only contact is a
25 telephone call with no follow-up communication.
26

27 (c) When a real estate broker representing the seller is involved in listing the
28 property, the seller shall provide this information to this listing broker, who, in
29 turn, shall make a reasonable effort to determine the accuracy of the
30 information provided by the seller.
31

32 (d) The listing broker shall provide the information to potential purchasers or
33 other agents/agencies so as to allow the real estate broker to comply with the
34 above notification requirements.
35

36 (2) All real estate brokers and individual sellers of real estate (when a real estate agent
37 is not involved) must advise potential purchasers in writing whether “to the best of
38 their knowledge and belief” the structure has ever been flooded.
39

40 (a) When a real estate broker representing the seller is involved in listing the
41 property, the seller shall provide this information to this listing broker that, in
42 turn, shall make a reasonable effort to determine the accuracy of the
43 information provided by the seller.
44

- 1 (b) The listing broker shall provide the information to potential purchasers or
2 other agents/agencies so as to allow the real estate broker to comply with the
3 above notification requirements.
4
- 5 (c) This written notification must occur at the same time as the notification of the
6 SFHA and potential flood insurance purchase requirement and can be
7 incorporated into the same document.
8
- 9 (3) All landlords must notify those interested in renting properties located in the
10 SFHA (flood zones beginning with the letter “A” or “V”) about the potential flood
11 hazard, whether they have purchased flood insurance on the building and contents,
12 and the ability of the renter to individually purchase flood insurance on building
13 contents.
14
- 15 (a) The notice must clearly state whether the property is in the SFHA.
16
- 17 (b) Additionally, the landlord is required to advise the potential renter in writing
18 whether “to the best of their knowledge and belief” the structure has ever been
19 flooded.
20
- 21 (c) The flood hazard and structure flooding disclosure document must be
22 provided to the potential renter prior to the initiation of the preparation of a
23 rental contract document.
24
- 25 (d) If an agent/agency is used to act as the landlord to represent the actual owner
26 of the rental property, it is the responsibility of the actual owner of the rental
27 property to provide the information to that agent/agency, and it is the
28 agent’s/agency’s responsibility to make a reasonable effort to determine the
29 accuracy of the information provided by the owner.
30
- 31 (4) All property boundary and individual lot surveys are required to show the flood
32 hazard area if the property is located within the SFHA (flood zones beginning
33 with the letter “A” or “V”) and include the base flood elevation, if applicable.
34
35

36 **SECTION 26: APPEALS PROCEDURE**
37

- 38 (1) The Board of Zoning Appeals as established by the BCC pursuant to LDC Section
39 8.04.00, shall hear and decide all appeals of determination made by the Floodplain
40 Administrator when an applicant alleges an error by the Floodplain Administrator in
41 the enforcement or administration of this ordinance.
42
- 43 (2) An appeal may be filed with the County Manager within no more than ten (10)
44 business days of the alleged error by the Floodplain Administrator.

- 1
2 (3) The filing fee for each appeal shall be that adopted in the Community Development
3 and Environmental Services Fee Schedule, Section A-7 (approved 12-11-07,
4 Resolution 07-357) as may be amended, replaced or superseded.
5
6 (4) Each appeal shall be written stating the basis for the appeal, and shall include
7 pertinent information, exhibits and other backup information in support of the
8 appeal.
9
10 (5) The Board of Zoning Appeals shall
11 a. hold an advertised public hearing on the appeal and shall consider the
12 appeal of the alleged error by the Floodplain Administrator decision in
13 light of the criteria set forth in this article;
14 b. adopt the Floodplain Administrator’s decision or determination,
15 whichever is applicable, with or without modifications or conditions, or
16 reject his decision or determination; and
17 c. shall not be authorized to modify or reject the Floodplain Administrator’s
18 decision or determination unless such board finds that the decision or
19 determination is not supported by substantial competent evidence or that
20 the decision or determination is contrary to the specific provisions of this
21 ordinance.
22
23 (5) Any appeal not acted upon within six months of the filing, due to the applicant’s
24 request to not schedule the required hearing, will be determined withdrawn and
25 cancelled.
26
27 (6) Any person aggrieved by the appellate decision of the Board of Zoning Appeals
28 may appeal such decision to the Circuit Court, as provided by law.
29
30

31 **SECTION 27: VARIANCE PROCEDURE, CRITERIA AND NOTICE**
32

- 33 (1) The Board of Zoning Appeals as established by the BCC pursuant to LDC Section
34 8.04.00, as may be amended, shall hear and decide requests for all variances from
35 the substantive requirements of this article, except as specifically allowed below.
36
37 (2) The Floodplain Administrator is authorized to make the final determination on a
38 request for variance from the requirements of this article solely for repair or
39 restoration of “historic” structures as defined in this article upon a finding that the
40 proposed repair or rehabilitation will not preclude the structure’s continued
41 designation as a “historic” structure. All other variances will be heard by the Board
42 of Zoning Appeals.
43

- 1 (3) A request for a variance to any requirement of this article shall follow the procedure
2 described in the Collier County Land Development Code Section 10.04.04, as may
3 be amended, for Applications Subject to Type III Review.
4
- 5 (4) The filing fee for each variance request shall be that adopted and in effect in
6 Community Development and Environmental Services Fee Schedule, Section K-10
7 (approved 12-11-07, Resolution 07-357) as may be amended, replaced or
8 superseded.
9
- 10 (5) In acting upon such applications, the Board of Zoning Appeals shall consider the
11 following criteria, including:
12
- 13 (a) a showing of good and sufficient cause;
 - 14
 - 15 (b) determining that failure to grant the variance would result in an exceptional
16 hardship to the applicant;
 - 17
 - 18 (c) determining that granting the variance will not result in increased flood
19 heights, additional threats to public safety, extraordinary public expense,
20 create nuisances, cause fraud on or victimization of the public, or conflict with
21 existing local laws or ordinances;
22
 - 23 (d) determining that the variance is the minimum necessary deviation from the
24 requirements of this article, considering the flood hazard, to afford relief; and
25
 - 26 (e) considering the following technical factors as they may be applicable:
27
 - 28 (i) The danger that materials may be swept onto other lands to the injury of
29 others;
 - 30
 - 31 (ii) The danger of life and property due to flooding or erosion damage;
 - 32
 - 33 (iii) The susceptibility of the proposed facility and its contents to flood
34 damage and the effect of such damage on the individual owner;
 - 35
 - 36 (iv) The importance of the services provided by the proposed facility to the
37 community;
 - 38
 - 39 (v) The necessity to the facility of a waterfront location, where applicable;
 - 40
 - 41 (vi) The availability of alternative locations for the proposed use which are
42 not subject to flooding or erosion damage;
 - 43

- 1 (vii) The compatibility of the proposed use with existing and anticipated
2 development;
3
- 4 (viii) The relationship of the proposed use to the comprehensive plan and
5 floodplain management program for that area;
6
- 7 (ix) The safety of access to the property in times of flood for ordinary and
8 emergency vehicles;
9
- 10 (x) The expected heights, velocity, duration, rate of rise, and sediment
11 transport of the flood waters and the effects of wave action, if
12 applicable, expected at the site;
13
- 14 (xi) The costs of providing governmental services during and after flood
15 conditions, including maintenance and repair of public utilities and
16 facilities such as sewer, gas, electrical, and water systems, and streets
17 and bridges.
18
- 19 (6) Variances shall not be issued within any designated floodway if any worsening
20 impact in flood conditions, or increase in flood levels during the base flood
21 discharge would result.
22
- 23 (7) Variances may be issued for new construction and substantial improvements to be
24 erected on a lot of one-half acre or less in size contiguous to and surrounded by lots
25 with existing structures constructed below the base flood level.
26
- 27 (8) Variances may be issued for new construction and substantial improvements and for
28 other development necessary for the conduct of a functionally dependent use if the
29 structure or other development is protected by methods that minimize flood
30 damages during the base flood and create no additional threats to public safety.
31
- 32 (9) Variances shall not be granted after the-fact.
33
- 34 (10) Upon consideration of the criteria and factors listed in subsections (5) through (9)
35 above, the Board of Zoning Appeals may deny or approve such variance request
36 and attach such conditions to the granting of variances, as it deems necessary to
37 further the purposes of this article.
38
- 39 (11) Any person aggrieved by the decision of the Board of Zoning Appeals may appeal
40 such decision to the Circuit Court, as provided by law.
41
- 42 (12) Any applicant to whom a variance is granted shall be given written notice under the
43 signature of the County Manager that:
44

- 1 (a) The issuance of a variance to construct a structure below the BFE will result
2 in increased premium rates for flood insurance commensurate with the
3 increased risk resulting from the reduced lowest floor elevation, and
4
5 (b) Such construction below the base flood level increases risks to life and
6 property.
7
8 (c) A copy of the notice shall be recorded by the Floodplain Administrator in the
9 Office of the Clerk of Court and shall be recorded in a manner so that it
10 appears in the chain of title of the affected parcel of land.
11
12 (13) The Floodplain Administrator shall maintain the records of all variance actions,
13 including justification for their issuance or denial, and report such variances in the
14 community's NFIP Biennial Report or upon request to FEMA and the State of
15 Florida, Department of Community Affairs, NFIP Coordinating Office.
16

17
18 **SECTION 28: CONFLICT AND SEVERABILITY**

19
20 In the event this ordinance conflicts with any other ordinance of Collier County or other
21 applicable law, the more restrictive shall apply. If any court of competent jurisdiction
22 holds any phrase or portion of this ordinance invalid or unconstitutional, such portion
23 shall be deemed a separate, distinct and independent provision and such holding shall not
24 affect the validity of the remaining portion.
25

26 **SECTION 29: INCLUSION IN THE CODE OF LAWS AND ORDINANCES**

27
28 The provisions of this ordinance shall become and be made a part the Code of Laws and
29 Ordinances of Collier County, Florida. The sections of the ordinance may be renumbered
30 or re-lettered to accomplish such, and the words "code" or "ordinance" may be changed
31 to "section", "article", or any other appropriate word.
32

33 **SECTION 30: REPEAL OF COLLIER COUNTY ORDINANCE NO. 86-28 (AS**
34 **SUBSEQUENTLY AMENDED BY ORDINANCE 87-80, ORDINANCE 90-31,**
35 **AND ORDINANCE 2005-51)**

36
37 Collier County Ordinance 86-28, and its subsequent amending ordinances (Ordinance 87-
38 80, Ordinance 90-31, and Ordinance 2005-51) are hereby repealed in their entirety as of
39 the effective date of this ordinance.
40

41
42 **SECTION 31: LIBERAL CONSTRUCTION**

43
44 This ordinance shall be liberally construed to effectuate its public purpose.

