

Appendix D
Flood Damage Prevention Ordinance
Florida Model



Federal Emergency Management Agency
3003 Chamblee-Tucker Road
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The following is offered as assistance for developing a floodplain management ordinance by a community that participates in the National Flood Insurance Program. It must be used in conjunction with the “model” ordinance. Specifically, below are the V Zone (coastal high hazard area) standards that must be included with the model by those communities that have mapped V Zones. It also includes suggested regulatory language.

AE and A1-30 ZONES without FLOODWAYS*: Development shall be prohibited within a distance of the top of the stream bank equal to {regulatory factor} times the width of the stream measured between the tops of each bank or twenty five feet each side from the top of the bank, whichever is greater, unless certification by a registered professional engineer is provided demonstrating that such encroachment shall not result in any increase in flood levels during the occurrence of the base flood discharge. (Note: this item is CRS eligible)

PERMIT OVERSIGHT PROVISIONS*: Upon placement of the lowest floor, and before construction continues, the permit holder shall submit to the Floodplain Administrator, a certification of the NGVD elevation of the lowest floor or floodproofing (nonresidential buildings) on forms designated by the Floodplain Administrator. In AE, A1-30, AH, V, VE, V1-30, and A and V Zones where the Community has adopted a regulatory Base Flood Elevation, said certification shall be prepared by or under the direct supervision of a registered land surveyor or professional engineer and certified by same. When floodproofing is utilized for a particular building said certification shall be prepared by or under the direct supervision of a professional engineer or architect and certified by same. Any continued work undertaken prior to submission of the certification shall be at the permit holder’s risk.

The elevation certification information shall be subject to review by the Floodplain Administrator. Deficiencies detected by such review shall be corrected by the permit holder immediately and prior to work resuming. Failure to submit the survey or failure to make required corrections, shall be cause to issue a stop work order against the development.*

V ZONE CERTIFICATIONS*:

A registered professional engineer or architect shall develop or review the structural design, specifications and plans for the development, and shall certify that the design and methods of construction to be used are in accordance with accepted standards of practice for meeting the provisions of {Cite section of Ordinance...reference CFR 60.3(e)(4)}. Certification shall specifically address that the design and methods of construction are such that:

1. The bottom of the lowest horizontal structural member of the lowest floor (excluding the pilings or columns) is elevated to or above the base flood elevation, (the lowest floor be elevated at least one foot above the base flood elevation.)*
2. The pile or column foundation and structure attached thereto is anchored to resist floatation, collapse, and lateral movement due to the effects of wind and water loads acting simultaneously on all building components,
3. Water loading values are those associated with the Base Flood,

* OPTIONAL

4. Wind loads values are those prescribed by State or local building codes and
5. Breakaway enclosures will collapse from water loads less than that which would occur during the base flood.

V ZONES: The following (or language more stringent) **must be incorporated** into a local Ordinance in a community that owns V Zones.

Definitions

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

“**Coastal High Hazard Area**” means an area of special flood hazard extending from offshore to the inland limit of a primary frontal dune along an open coast and any other area subject to high velocity wave action from storms or seismic sources. The area is designated on the FIRM as Zone VI - 30, VE or V.

“**Mangrove stand**” means an assemblage of mangrove trees which is mostly low trees noted for a copious development of interlacing adventitious roots above the ground and which contain one or more of the following species: black mangrove (*Avicennia nitida*); red mangrove (*Rhizophora mangle*); white mangrove (*Longuncular-iaracemosa*); and buttonwood (*Conocarpus erecta*).

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

Coastal High Hazard Areas (V Zones). Located within the areas of special flood hazard established in {Cite section of Ordinance (Basis for Establishment)}, are areas designated as Coastal High Hazard areas. These areas have special flood hazards associated with wave wash, therefore, the following provisions shall apply:

- (a) All new construction and substantial improvements to existing structures shall be located {**Value**}* feet landward of the reach of the mean high tide;
- (b) All new construction and substantial improvements to existing structures shall be elevated so that the bottom of the lowest horizontal structural member (excluding pilings or columns) is elevated to or above **{at least one foot above the base flood elevation}*** the base flood elevation. All space below the lowest floor shall remain free of obstruction. Open lattice work or decorative screening may be permitted for aesthetic purposes only and must be designed to wash away in the event of abnormal wave action and in accordance with (6) (f) below;
- (c) All new construction and substantial improvements of existing structures shall be securely anchored on pilings or columns;
- (d) All pile and column foundations and structures attached thereto shall be anchored to resist flotation, collapse, and lateral movement due to the effect of wind and water loads acting simultaneously on all building components. Water loading values shall equal or exceed the base flood. Wind loading values shall be in accordance with **{Building Code citation}**.
- (e) A registered professional engineer or architect shall certify that the design, specifications and plans for construction are in compliance with the provisions contained in **{Cite section of**

* **OPTIONAL**

Ordinance}.

- (f) All space below the lowest horizontal structural member must remain free of obstruction. Open lattice work or decorative screening may be permitted for aesthetic purposes only and must be designed to wash away in the event of abnormal wave action without causing structural damage to the supporting foundation or elevated portion of the structure. The following design specifications are allowed:
 - (i) No solid walls shall be allowed, and;
 - (ii) Material shall consist of lattice or mesh screening only.
 - (iii) If aesthetic lattice work or screening is utilized, any enclosed space shall not be used for human habitation, but shall be designed to be used only for parking of vehicles, building access, or limited storage of maintenance equipment used in connection with the premises.
- (g) Prior to construction, plans for any structures having lattice work or decorative screening must be submitted to the **{Permitting Office}** for approval;
- (h) Any alteration, repair, reconstruction or improvement to a structure shall not include enclosing the space below the lowest floor except with latticework or decorative screening, as provided for in (6) (f) and (g) above.
- (i) The use of fill for structural support is prohibited. Non-compacted fill may be used around the perimeter of a building for landscaping/aesthetic purposes provided the fill will wash out from storm surge, (thereby rendering the building free of obstruction) prior to generating excessive loading forces, ramping effects, or wave deflection. The Floodplain Administrator shall approve design plans for landscaping/aesthetic fill only after the applicant has provided an analysis by an engineer, architect, and/or soil scientist, which demonstrates that the following factors have been fully considered:
 - (i) Particle composition of fill material does not have a tendency for excessive natural compaction;
 - (ii) Volume and distribution of fill will not cause wave deflection to adjacent properties; and
 - (iii) Slope of fill will not cause wave run-up or ramping.
- (j) There shall be no alteration of sand dunes or mangrove stands which would increase potential flood damage;
- (k) Prohibit the placement of manufactured homes, except in an existing manufactured home park or subdivision. A replacement manufactured home may be placed on a lot in an existing manufactured home park or subdivision provided the anchoring standards of **{Cite section of Ordinance...reference CFR 60.3(e)(8)}**, the elevation standards of **{Cite section of Ordinance...reference CFR 60.3(e)(8)}** and the encroachment standards of **{Cite section of Ordinance...reference CFR 60.3(e)(8)}**, are met.



MODEL

FLOOD DAMAGE PREVENTION ORDINANCE

RECOMMENDED FOR NFIP COMMUNITIES

ACKNOWLEDGMENT

THANKS TO:

**FEMA REGION IV STAFF
STATE OF CALIFORNIA
STATE OF SOUTH CAROLINA
STATE OF WASHINGTON
STATE OF MISSISSIPPI**

MODEL

Revised 7/99

MODEL FLOOD DAMAGE PREVENTION ORDINANCE

The following is provided to assist you in developing an ordinance that will comply with the minimum participating criteria of the National Flood Insurance Program (NFIP). It is recommended that a Community's attorney(s) consider necessary additions and include all required information and delegations to the model. It is not intended that this model, if adopted, will serve all of a Community's needs as related to floodplain management, land use, or zoning. Any Community may adopt standards that are more restrictive than the minimum NFIP participating standards. This model ordinance will denote the minimum federal regulations governing community participation in the NFIP and local regulation of development in Special Flood Hazard Areas (SFHA). Additionally, it will provide some **suggested** enhancements for consideration.

This model ordinance includes sections for development in shallow flooding areas (AO & AH Zones), coastal high hazard areas (V Zones), and floodways with definitions of appropriate terms pertaining to these areas. If your community does not have any of these features designated on its Flood Insurance Rate Map (FIRM), it is not necessary to adopt these sections and definitions in its ordinance.

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

FLOOD DAMAGE PREVENTION ORDINANCE

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Recommended Higher Standards:

- (1) Substantial Improvement may be tracked for a 3 to 5 year period.
- (2) New construction and subsequent improvements may be treated as one and the same.
- (3) A 'freeboard' of a minimum of 1 to 2 feet may be used by communities.

Article 1. Statutory Authorization, Findings of Fact, Purpose, and Objectives

Section A. Statutory Authorization.

The Legislature of the State of {State} has in {cite sections of authorizing legislation} delegated the responsibility to local government units to adopt regulations designed to promote the public health, safety, and general welfare of its citizenry. Therefore, the {governing body} of {county or municipality} does hereby adopt the following floodplain management regulations.

Section B. Findings of Fact.

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

Section C. Statement of Purpose.

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

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

Section D. Objectives.

The objectives of this ordinance are:

- (1) To protect human life and health;
- (2) To minimize expenditure of public money for costly flood control projects;
- (3) To minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- (4) To minimize prolonged business interruptions;

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

Section E. Methods of Reducing Flood Losses.

In order to accomplish its purposes, this ordinance includes methods and provisions for:

- (1) Restricting or prohibiting uses which are dangerous to health, safety, and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;
- (2) Requiring that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
- (3) Controlling the alteration of natural floodplains, stream channels, and natural protective barriers, which help accommodate or channel flood waters;
- (4) Controlling filling, grading, dredging, and other development which may increase flood damage; and,
- (5) Preventing or regulating the construction of flood barriers that will unnaturally divert flood waters or may increase flood hazards in other areas.

Article 2. Definitions.

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

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

Addition (to an existing building) means any walled and roofed expansion to the perimeter of a building in which the addition is connected by a common load-bearing wall other than a firewall. Any walled and roofed addition, which is connected by a firewall or is separated by independent perimeter load-bearing walls, is new construction.

Appeal means a request for a review of the floodplain administrator's interpretation of any provision of this ordinance or a request for a variance.

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

Area of special flood hazard is the land in the floodplain within a community subject to a one- percent or greater chance of flooding in any given year.

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

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

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

Building see **Structure**.

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

Critical facility means a facility for which even a slight chance of flooding might be too great. Critical facilities include, but are not limited to schools, nursing homes, hospitals, police, fire and emergency response installations, installations which produce, use or store hazardous materials or hazardous waste.

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

Elevated building means a non-basement building built to have the lowest floor elevated above the ground level by means of fill, solid foundation perimeter walls, pilings, columns (posts and piers), shear walls, or breakaway walls.

***Only incorporate in your ordinance if your community has AO or AH Zones**

****Only incorporate in your ordinance if your community has V Zones.**

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

Existing Construction— any structure for which the “start of construction” commenced before **{the effective date of the first floodplain management code, ordinance, or standard based upon specific technical base flood elevation data which establishes the area of special flood hazard} or {specific date}**.

Existing manufactured home park or subdivision means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed before the effective date of the floodplain management regulations adopted by a community before **{the effective date of the first floodplain management code, ordinance, or standard based upon specific technical base flood elevation data which established the area of special flood hazard} or {specific date}**.

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

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

- a.)The overflow of inland or tidal waters;
- b.)The unusual and rapid accumulation or runoff of surface waters from any source.

Flood Boundary and Floodway Map (FBFM) means the official map on which the Federal Emergency Management Agency (FEMA) or Federal Insurance Administration (FIA) has delineated the areas of flood hazards and regulatory floodway.

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

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

Flood Insurance Study (FIS) is the official hydraulic & hydrologic report provided by FEMA. The report contains flood profiles, as well as the FIRM, FHBM (where applicable) and the water surface elevation of the base flood.

Floodplain means any land area susceptible to flooding.

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

Floodplain Management Administrator is the individual appointed to administer and enforce the floodplain management regulations.

Floodplain management regulations means this ordinance and other zoning ordinances, subdivision regulations, building codes, health regulations, special purpose ordinances, and other applications of police power which control development in flood-prone areas. This term describes federal, state or local regulations in any combination thereof, which provide standards for preventing and reducing flood loss and damage.

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

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

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

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

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

Historic Structure means any structure that is:

- a.) Listed individually in the National Register of Historic Places (a listing maintained by the Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register:
- b.) Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic or a district preliminarily determined by the Secretary to qualify as a registered historic district:
- c.) Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of the Interior; or

- d.) Individually listed on a local inventory historic places in communities with historic preservation programs that have been certified either:
1. By an approved state program as determined by the Secretary of the Interior, or
 2. Directly by the Secretary of the Interior in states without approved programs.

Increased Cost of Construction (ICC) means the cost to repair a substantially damaged building that exceeds the minimal repair cost and that is required to bring a substantially damaged building into compliance with the local flood damage prevention ordinance. ICC insurance coverage is provided in a standard (NFIP) flood insurance policy.

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

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

Manufactured home means a building, transportable in one or more sections, which is built on a permanent chassis and designed to be used with or without a permanent foundation when connected to the required utilities. The term also includes park trailers, travel trailers, and similar transportable structures placed on a site for 180 consecutive days or longer and intended to be improved property.

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

Market value means the building value, excluding the land (as agreed to between a willing buyer and seller), as established by what the local real estate market will bear. Market value can be established by independent certified appraisal, replacement cost depreciated by age of building (Actual Cash Value) or adjusted assessed values.

Mean Sea Level means the average height of the sea for all stages of the tide. It is used as a reference for establishing various elevations within the floodplain. For purposes of this ordinance, the term is synonymous with National Geodetic Vertical Datum (NGVD).

National Geodetic Vertical Datum (NGVD) as corrected in 1929 is a vertical control used as a reference for establishing varying elevations within the floodplain.

New Construction means any structure for which the "start of construction" commenced after **{the effective date of the first floodplain management code, ordinance, or standard based upon specific technical base flood elevation data which establishes the area of special flood hazard.}** or **{specific date}**. The term also includes any subsequent improvements to such structures.

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

Obstruction includes, but is not limited to, any dam, wall, wharf, embankment, levee, dike, pile, abutment, protection, excavation, channelization, bridge, conduit, culvert, building, wire, fence, rock, gravel, refuse, fill, structure, vegetation or other material in, along, across or projecting into any watercourse which may alter, impede, retard or change the direction and/or velocity of the flow of water, or due to its location, its propensity to snare or collect debris carried by the flow of water, or its likelihood of being carried downstream.

Public safety and nuisance, anything which is injurious to safety or health of an entire community or 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:

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

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

Repetitive Loss means flood-related damages sustained by a structure on two separate occasions during a 10-year period ending on the date of the event for which the second claim is made, in which the cost of repairing the flood damage, on the average, equaled or exceeded 25% of the market value of the building at the time of each such flood event.

Special flood hazard area (SFHA) (see Area of Special Flood Hazard) means an area having special flood hazard and shown on a FHBM or FIRM as Zone A, AO, A1-A30, AE, A99, or AH.

Start of construction (for other than new construction or substantial improvements under the Coastal Barrier Resources Act P. L. 97-348), includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, or improvement was within 180 days of the permit date. The actual start means the first placement of permanent construction of a building (including a manufactured home) on a site, such as the pouring of slabs or footings, installation of piles, construction of columns, or any work beyond the stage of excavation or placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers or foundations or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main building. For substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

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

Substantial damage means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred. [Substantial damage also means flood-related damages sustained by a structure on two separate occasions during a 10-year period for which the cost of repairs at the time of each such flood event, on the average, equals or exceeds 25 percent of the market value of the structure before the damage occurred.]*

* **Optional but required for ICC eligibility for substantially damaged buildings.**

Substantial improvement means any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure before the “start of construction” of the improvement. This term includes structures which have incurred “repetitive loss” or “substantial damage,” regardless of the actual repair work performed. [This includes any combination of repairs, reconstruction, alteration, or improvements to a building taking place during (the life of the building) or {a ____year period}]*, in which the cumulative cost equals or exceeds 50 percent of the market value of the building either:

- a.) Before the improvement or repair is started; or,
- b.) If the structure has been damaged and is being restored, before the damage occurred. For the purposes of this definition “substantial improvement” is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure.

This term includes structures that have incurred “substantial damage” and are “repetitive loss,” regardless of the actual repair work performed. For the purposes of this definition, “substantial improvement” is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the building. The term does not, however, include either:

- a.) Any project for improvement of a building required to comply with existing health, sanitary, or safety code violations which have been identified prior to permit issuance by the Code Enforcement Official and which are solely necessary to assure safe living conditions; or,
- b.) Any alteration of a “historic structure” provided that the alteration will not preclude the structure’s continued designation as a “historic structure.”

***Optional and recommend that it be augmented with written and adopted community policy and procedure.**

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

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

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

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

Water surface elevation means the height, in relation to the National Geodetic Vertical Datum (NGVD) of 1929, (or other datum, where specified) of floods of various magnitudes and frequencies in the floodplains of coastal or riverine areas.

Article 3. General Provisions.

Section A. Lands to Which This Ordinance Applies.

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

Section B. Basis for Establishing the Areas of Special Flood Hazard

The areas of special flood hazard identified by the Federal Emergency Management Agency in the {title of applicable map and/or flood insurance study}, dated {applicable date(s)}, with accompanying maps and other supporting data, and any revision thereto, are adopted by reference and declared to be a part of this ordinance. **The Flood Insurance Study is on file at {_____} (If applicable.)**

Section C. Establishment of Development Permit

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

Section D. Compliance.

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

Section E. Abrogation and Greater Restrictions.

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

Section F. Interpretation.

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

- (1) Considered as minimum requirements;
- (2) Liberally construed in favor of the governing body, and;
- (3) Deemed neither to limit nor repeal any other powers granted under state statutes.

Section G. Warning and Disclaimer of Liability.

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

Section H. Penalties for Violation.

Violation of the provisions of this ordinance or failure to comply with any of its requirements, including violation of conditions and safeguards established in connection with grants of variance or special exceptions, shall constitute a misdemeanor. Any person who violates this ordinance or fails to comply with any of its requirements shall, upon conviction thereof, be fined not more than {\$_} or imprisoned for not more than {__} days, or both, and in addition, shall pay all costs and expenses involved in the case. Each day such violation continues shall be considered a separate offense. Nothing herein contained shall prevent the {floodplain management administrator's title} from taking such other lawful actions as is necessary to prevent or remedy any violation.

Article 4. Administration

Section A. Designation of Flood Damage Prevention Ordinance Administrator.

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

Section B. Permit Procedures.

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

- (1) Application Stage.
 - a.) Elevation in relation to mean sea level of the proposed lowest floor (including basement) of all buildings;
 - b.) Elevation in relation to mean sea level to which any non-residential building will be flood-proofed;
 - c.) Certificate from a registered professional engineer or architect that the non-residential flood-proofed building will meet the flood-proofing criteria in Article 5, Section B (2) and Section D (2);
 - d.) Description of the extent to which any watercourse will be altered or relocated as result of proposed development, and;
- (2) Construction Stage:

Upon placement of the lowest floor, or flood-proofing by whatever construction means, it shall be the duty of the permit holder to submit to the Floodplain Management Administrator a certification of the NGVD elevation of the lowest floor or flood-proofed elevation, as built, in relation to mean sea level. Said certification shall be prepared by or under the direct supervision of a registered land surveyor or professional engineer and certified by same. When flood proofing is utilized for a particular building said certification shall be prepared by or under the direct supervision of a professional engineer or architect and certified by same. Any work undertaken prior to submission of the certification shall be at the permit holder' risk. (The Floodplain Management Administrator shall review the lowest floor & flood-proofing elevation survey data submitted.) The permit holder immediately and prior to further progressive work being permitted to proceed shall correct deficiencies detected by such review. Failure to submit the survey or failure to make said corrections required hereby, shall be cause to issue a stop-work order for the project.

Section C. Duties and Responsibilities of the Floodplain Management Administrator.

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

- (1) Review all development permits to assure that the permit requirements of this ordinance have been satisfied;
- (2) Advise permittee that additional federal or state permits may be required, and if specific federal or state permit requirements are known, require that copies of such permits be provided and maintained on file with the development permit.
- (3) Notify adjacent communities, the State Floodplain Coordinator, and other federal and/or state agencies with statutory or regulatory authority prior to any alteration or relocation of a watercourse.
- (4) Assure that maintenance is provided within the altered or relocated portion of said watercourse so that the flood-carrying capacity is not diminished.
- (5) Verify and record the actual elevation (in relation to mean sea level) of the lowest floor (including basement) of all new or substantially improved buildings, in accordance with Article 4, Section B (2).

- (6) Verify and record the actual elevation (in relation to mean sea level) to which the new or substantially improved buildings have been flood-proofed, in accordance with Article 4, Section B (2).
- (7) Review certified plans and specifications for compliance.

Where interpretation is needed as to the exact location of boundaries of the areas of special flood hazard (for example, where there appears to be a conflict between a mapped boundary and actual field conditions) the Floodplain Management Administrator shall make

***Only incorporate in your ordinance if your community has AO or AH zones.**

****Only incorporate in your ordinance if your community has V zones.**

- (8) the necessary interpretation. The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in this article.
- (9) When base flood elevation data or floodway data have not been provided in accordance with Article 3, Section B, then the Floodplain Management Administrator shall obtain, review and reasonably utilize any base flood elevation and floodway data available from a federal, state or other source, in order to administer the provisions of Article 5.

Article 5. Provisions for Flood Hazard Reduction.

Section A. General Standards.

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

- (1) New construction and substantial improvements shall be anchored to prevent flotation, collapse or lateral movement of the structure;
- (2) Manufactured homes shall be anchored to prevent flotation, collapse, or lateral movement. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. This standard shall be in addition to and consistent with applicable state requirements for resisting wind forces;
- (3) New construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage;
- (4) New construction or substantial improvements shall be constructed by methods and practices that minimize flood damage;
- (5) Electrical, heating, ventilation, plumbing, air conditioning equipment and other service facilities shall be designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding;
- (6) New and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system;
- (7) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters;
- (8) On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding;
- (9) Any alteration, repair, reconstruction or improvements to a building that is in compliance with the provisions of this ordinance shall meet the requirements of “new construction” as contained in this ordinance; and,

- (10) Any alteration, repair, reconstruction or improvements to a building that is not in compliance with the provisions of this ordinance, shall be undertaken only if said non-conformity is not furthered, extended, or replaced.

Section B. Specific Standards.

In all areas of special flood hazard where base flood elevation data have been provided, as set forth in Article 3, Section B, the following provisions are required:

- (1) **Residential Construction.** New construction or substantial improvement of any residential building (or manufactured home) shall have the lowest floor, including basement, elevated no lower than {__feet} above the base flood elevation. Should solid foundation perimeter walls be used to elevate a structure, openings sufficient to facilitate the unimpeded movements of flood waters shall be provided in accordance with standards of Article 5, Section B (3).
- (2) **Non-Residential Construction.** New construction or substantial improvement of any commercial, industrial, or non-residential building (or manufactured home) shall have the lowest floor, including basement, elevated to no lower than {__feet} above the level of the base flood elevation. Buildings located in all A-Zones may be flood-proofed in lieu of being elevated provided that all areas of the building below the BFE (plus any community free board) elevation are water tight with walls substantially impermeable to the passage of water, and use structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effect of buoyancy. A registered professional engineer or architect shall certify that the standards of this subsection are satisfied. Such certification shall be provided to the official as set forth in Article 4, Section C (9).
- (3) **Elevated Buildings.** New construction or substantial improvements of elevated buildings that include fully enclosed areas formed by foundation and other exterior walls below the base flood elevations shall be designed to preclude finished living space and designed to allow for the entry and exit of floodwaters to automatically equalize hydrostatic flood forces on exterior walls.
 - a.) Designs for complying with this requirement must either be certified by a professional engineer or architect or meet the following minimum criteria:
 - (i) Provide a minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding;
 - (ii) The bottom of all openings shall be no higher than one foot above foundation interior grade (which must be equal to in elevation or higher than the exterior foundation grade); and,
 - (iii) Openings may be equipped with screens, louvers, valves or other coverings or devices provided they permit the automatic flow of floodwaters in both directions.
 - b.) Access to the enclosed area shall be minimum necessary to allow for parking of vehicles (garage door) or limited storage of maintenance equipment used in connection with the premises (standard exterior door) or entry to the living area (stairway or elevator); and
 - c.) The interior portion of such enclosed area shall not be partitioned or finished into separate rooms.
 - d.) **Where elevation requirements exceed 6 feet above the highest adjacent grade, a copy of the legally recorded deed restriction prohibiting the conversion of the area below the lowest floor to a use or dimension contrary to the building's originally approved design, shall be presented as a condition of issuance of the final Certificate of Occupancy. ***

* Optional

(4) Standards for Manufactured Homes and Recreational Vehicles.

- a.) All manufactured homes placed, or substantially improved, on individual lots or parcels, in expansions to existing manufactured home parks or subdivisions, in a new manufactured home park or subdivision or in substantially improved manufactured home parks or subdivisions, must meet all the requirements for new construction, including elevation and anchoring.
- b.) All manufactured homes placed or substantially improved in an existing manufactured home park or subdivision must be elevated so that:
 - (i) The lowest floor of the manufactured home is elevated no lower than {__feet} above the level of the base flood elevation, or
 - (ii) The manufactured home chassis is supported by reinforced piers or other foundation elements of at least an equivalent strength, of no less than 36 inches in height above the ground.
 - (iii) The manufactured home must be securely anchored to the adequately anchored foundation system to resist flotation, collapse and lateral movement.
 - (iv) In an existing manufactured home park or subdivision on which a manufactured home has incurred “substantial damage” as the result of a flood, any manufactured home placed or substantially improved must meet the standards of Article 5, Section B (4) (b) (i) and (iii) above.
- c.) All recreational vehicles placed on sites must either:
 - (i) Be fully licensed and ready for highway use (a recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices and has no permanently attached additions), or;
 - (ii) meet all the requirements for new construction, including anchoring and elevation requirements of Article 5, Section B (4) (a) or (b) (i) and (iii), above, or;
 - (iii) Be on the site for fewer than 180 consecutive days.

(5) **Floodways***. Located within areas of special flood hazard established in Article 3, Section B, are areas designated as floodways. Since the floodway is an extremely hazardous area due to the velocity of flood waters which carry debris, potential projectiles and has erosion potential, the following provisions shall apply:

- a.) Prohibit encroachments, including fill, new construction, substantial improvements and other developments unless certification (with supporting technical data) by a registered professional engineer is provided demonstrating that encroachments shall not result in any increase in flood levels during occurrence of the base flood discharge;
- b.) If Article 5, Section B (5) (a) is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of Article 5.
- c.) Prohibit the placement of manufactured homes (mobile homes), except in an existing manufactured homes (mobile homes) park or subdivision. A replacement manufactured home may be placed on a lot in an existing manufactured home park or subdivision provided the anchoring standards of Article 5, Section A (2), and the elevation standards of Article 5, Section B (1) and the encroachment standards of Article 5, Section B (5) (a), are met.

* Incorporate only if your community has been provided floodway data in the current FIS.

Section C. Standards for Streams Without Established Base Flood Elevation and/or Floodways.

Located within the areas of special flood hazard established in Article 3, Section B, where streams exist but where no base flood data has been provided or where base flood data has been provided without floodways, the following provisions apply:

- (1) When base flood elevation data or floodway data have not been provided in Accordance with Article 3, Section B, then the local administrator shall obtain, review, and reasonably utilize any base flood elevation and floodway data available from a federal, state, or other source, in order to administer the provisions of Article 5. If data is not available from outside sources, then the following provisions (2 and 3) shall apply.
 - a.) No encroachments, including fill material or structures, shall be located within a distance of the stream bank equal to {___} times the width of the stream at the top of the bank or {___} feet each side from the top of the bank, whichever is greater, unless certification by a registered professional engineer is provided demonstrating that such encroachment shall not result in any increase in flood levels during the occurrence of the base flood discharge. (NOTE: Use of center line of a stream may be a more suitable standard under some conditions)
 - b.) In Special Flood Hazard Areas without Base Flood Elevation Data, new construction and substantial improvements of existing structures shall have the lowest floor of the lowest enclosed area (including basement) elevated no less than {___} feet above the highest adjacent grade at the building site. (NOTE: A building in a SFHA as stated above, can never be elevated less than 2 feet above the highest adjacent grade (HAG) as defined in Article 2 without a Letter of Map Correction being issued first. The insurance rates for post FIRM buildings in these areas drop drastically after 5 feet of elevation. A building elevated to 7 feet above the HAG, maintains an “uninhabitable” space below the lowest floor and a space usable for parking, storage, and access. It also is provided with a high level of flood damage protection for a flood condition that is virtually unknown. In all cases, it is recommended that, unless it is required to produce a BFE for all development, the local attorney be consulted regarding culpability and liability for utilizing default values for unknown hazardous conditions.)

Section D. Standards for Subdivision Proposals (AO Zones).*

Located within the areas of special flood hazard established in Article 3, Section B, are areas designated as shallow flooding areas. These areas have flood hazards associated with base flood depths of one to three feet (1 – 3’), where a clearly defined channel does not exist and the water path of flooding is unpredictable and indeterminate; therefore, the following provisions apply:

- (1) All new construction and substantial improvements of residential structures shall have the lowest floor, including basement, elevated to the flood depth number specified on the Flood Insurance Rate Map, above the highest adjacent grade. If no flood depth number is specified, the lowest floor, including basement, shall be elevated no less than three (2) feet above the highest adjacent grade. **
- (2) All new construction and substantial improvements of non-residential structures shall:
 - a.) Have the lowest floor, including basement, elevated to the flood depth number specified on the Flood Insurance Rate Map above the highest adjacent grade. If no flood depth number is specified, the lowest floor, including basement, shall be elevated at least two (2) feet** above the highest adjacent grade, or;
 - b.) Together with attendant utility and sanitary facilities be completely flood-proofed to the specified flood level so that any space below that level is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. Certification is required as per Article 5, Section B (2).

*Include this section (Section D) if your community has AO zones.

**Recommend freeboard of at least 1 foot

Section E. Standards for Subdivision Proposals.

- (1) All subdivision proposals shall be consistent with the need to minimize flood damage;
- (2) All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage;
- (3) All subdivision proposals shall have adequate drainage provided to reduce exposure to flood hazards, and;
- (4) Base flood elevation data shall be provided for subdivision proposals and other proposed development (including manufactured home parks and subdivisions) which is greater than the lesser of fifty lots or five acres.

Section F. Coastal High Hazard Areas. *

Located within areas of special flood hazard areas established in Article 3, Section B are Coastal High Hazard Areas, designated as Zones V1 – V30, VE and/or V. These areas have special flood hazards associated with high velocity waters from surges and, therefore, in addition to meeting all provisions in this ordinance, the following provisions shall also apply:

- (1) All new construction and substantial improvements in Zones V1 – V30 and VE (V if base flood elevation is available) shall be elevated on pilings and columns so that:
 - a.) The bottom of the lowest horizontal structural member of the lowest floor (excluding the pilings or columns) is elevated one foot* or more above the base flood level; and,
 - b.) The pile or column foundation and structure attached thereto is anchored to resist flotation, collapse and lateral movement due to the effects of wind and water loads acting simultaneously on all building components. Wind and water loading values shall each have a one percent chance of being equaled or exceeded in any given year (100-year mean recurrence interval).
- (2) A registered professional engineer or architect shall develop or review the structural design, specifications and plans for the construction, and shall certify that the design and methods of construction to be used are in accordance with accepted standards of practice for meeting the provisions of Section F (1) (a) and (b).
- (3) Obtain the elevation (in relation to mean sea level) of the bottom of the lowest structural member of the lowest floor (excluding pilings and columns) of all new and substantially improved structures in Zones V1 – V30 and VE. The Floodplain Management Administrator shall maintain a record of all such information.
- (4) All new construction shall be located landward of the reach of mean high tide.
- (5) Provide that all new construction and substantial improvements have the space below the lowest floor either free of obstruction or constructed with nonsupporting breakaway walls**, open wood lattice-work, or insect screening intended to collapse under wind and water loads without causing collapse, displacement, or other structural damage to the elevated portion of the building or supporting foundation system. For the purpose of this section, a breakaway wall shall have a design safe loading resistance of not less than 10 and no more than 20 pounds per square foot. Use of breakaway walls which exceed a design safe loading resistance of 20 pounds per square foot (either by design or when so required by local codes) may be permitted only if a registered professional engineer or architect certifies that the designs proposed meet the following conditions:
 - a.) Breakaway wall collapse shall result from water load less than that which would occur during the base flood; and,
 - b.) The elevated portion of the building and supporting foundation system shall not be subject to collapse, displacement, or other structural damage due to the effects of wind and water loads acting

simultaneously on all building components (structural and nonstructural). Maximum wind and water loading values to be used in this determination shall each have a one percent chance of being equaled or exceeded in any given year.

- (6) If breakaway walls are utilized, such enclosed space shall be useable solely for parking of vehicles, building access, or storage. Such space shall not be used for human habitation.

**** consider prohibiting the use of solid breakaway walls thereby allowing only the use of breakaway screening or lattice work**

- (7) Prohibit the use of fill for structural support of buildings.

- (8) Prohibit man-made alteration of sand dunes that would increase potential flood damage.

- (9) All manufactured homes to be placed or substantially improved within Zones V1 – V30, V, and VE on the community's FIRM on sites:

- a.) Outside of a manufactured home park or subdivision,
- b.) In a new manufactured home park or subdivision,
- c.) In an expansion to an existing manufactured home park or subdivision, or
- d.) In an existing manufactured home park or subdivision on which a manufactured home has incurred "substantial damage" as the result of a flood;

meet the standards of Article 5, Section F (1) through (8) and that manufactured homes placed or substantially improved on other sites in an existing manufactured home park or subdivision with Zones V1 – V30, V, and VE on the FIRM meet the requirements of Article 5, Section B (4) (a) through (b).

- (10) Recreational vehicles placed on sites within Zones V1 – V30, V, and VE on the community's FIRM either;

- a.) Be on the site for fewer than 180 consecutive days,
- b.) Be fully licensed and ready for highway use, on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached additions; or
- c.) Meet the requirements of Article 4, Section B (Permit Procedures) and Article 5, Section B and Section F.

***Include this section (Section F) if your community has V Zones.**

Section G. Critical Facility.

Construction of new critical facilities shall be, to the extent possible, located outside the limits of the special flood hazard area (SFHA) (100-year floodplain). Construction of new critical facilities shall be permissible within the SFHA if no feasible alternative site is available. Critical facilities constructed within the SFHA shall have the lowest floor elevated three feet or more above the level of the base flood elevation at the site. Floodproofing and sealing measures must be taken to ensure that toxic substances will not be displaced by or released into floodwaters. Access routes elevated to or above the level of the base flood elevation shall be provided to all critical facilities to the extent possible.

Article 6. Variance Procedures.

Section A. Designation of Variance and Appeals Board

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

Section B. Duties of Variance and Appeals Board.

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

Section C. Variance Procedures.

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

- (1) The danger that materials may be swept onto other lands to the injury of others;
- (2) The danger of life and property due to flooding or erosion damage;
- (3) The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
- (4) The importance of the services provided by the proposed facility to the community;
- (5) The necessity to the facility of a waterfront location, where applicable;
- (6) The availability of alternative locations for the proposed use which are not subject to flooding or erosion damage;
- (7) The compatibility of the proposed use with existing and anticipated development;
- (8) The relationship of the proposed use to the comprehensive plan and floodplain management program for that area;
- (9) The safety of access to the property in times of flood for ordinary and emergency vehicles;
- (10) The expected heights, velocity, duration, rate of rise, and sediment of transport of the flood waters and the effects of wave action, if applicable, expected at the site; and,
- (11) The costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems, and streets and bridges.

Section D. Conditions for Variances.

- (1) Variances shall only be issued when there is:
- a.) A showing of good and sufficient cause;
 - b.) A determination that failure to grant the variance would result in exceptional hardship; and,

- c.) A determination that the granting of a variance will not result in increased flood heights, additional threats to public expense, create nuisance, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances.
- (2) Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief; and in the instance of an “historic structure,” a determination that the variance is the minimum necessary so as not to destroy the historic character and design of the building.
- (3) Any applicant to whom a variance is granted shall be given written notice specifying the difference between the base flood elevation and the elevation to which the lowest floor is to be built and stating that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation. (See Article 6, Section E.)
- (4) The Floodplain Management Administrator shall maintain the records of all appeal actions and report any variances to the Federal Emergency Management Agency or **{State Coordinating Agency}** upon request. (See Section E.)

Section E. Variance Notification.

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

- (1) The issuance of a variance to construct a structure below the base flood elevation will result in increased premium rates for flood insurance up to amounts as high as \$25 for \$100 of insurance coverage, and;
- (2) Such construction below the base flood level increases risks to life and property. A copy of the notice shall be recorded by the Floodplain Management Administrator in the Office of the **{county or municipality}** Recorder and shall be recorded in a manner so that it appears in the chain of title of the affected parcel of land. **(The second sentence of this section is an option available to the community.)**

The Floodplain Management Administrator will maintain a record of all variance actions, including justification for their issuance, and report such variances issued in the community’s biennial report submission to the Federal Emergency Management Agency.

Section F. Historic Structures.

Variances may be issued for the repair or rehabilitation of “historic structures” upon a determination that the proposed repair or rehabilitation will not preclude the structure’s continued designation as an “historic structure” and the variance is the minimum to preserve the historic character and design of the structure.

Section G. Special Conditions.

Upon consideration of the factors listed in Article 6, and the purposes of this ordinance, the {appointed board} may attach such conditions to the granting of variances as it deems necessary to further the purposes of this ordinance.

Section H. No-Impact Certification Within the Floodway*.

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

*** Incorporate only if your community has been provided floodway data in the current FIS.**

Article 7. Severability.

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

Ordinance Adopted: {_____}.

By: {_____}.

Attested By:{_____}.