

BOARD OF SUPERVISORS
COUNTY OF YORK
YORKTOWN, VIRGINIA

Resolution

At a regular meeting of the York County Board of Supervisors held in York Hall, Yorktown, Virginia, on the ____ day of _____, 2014:

Present

Vote

Donald E. Wiggins, Chairman
Thomas G. Shepperd, Jr., Vice Chairman
Walter C. Zaremba
Sheila S. Noll
George S. Hrichak

On motion of _____, which carried ____, the following resolution was adopted:

A RESOLUTION TO SPONSOR AN APPLICATION TO AMEND THE YORK COUNTY ZONING ORDINANCE (CHAPTER 24.1, YORK COUNTY CODE) TO REVISE SECTION 24.1-373. FMA-FLOODPLAIN MANAGEMENT AREA OVERLAY DISTRICT TO INCORPORATE CERTAIN CHANGES REQUIRED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY

WHEREAS, Section 24.1-373 of the Zoning Ordinance sets forth the requirements applicable to floodplain management areas in the County; and

WHEREAS, the Federal Emergency Management Agency has notified the County of the need for certain revisions in the floodplain management overlay provisions in order to maintain full compliance with the requirements of the National Flood Insurance Program; and

WHEREAS, the Board of Supervisors has determined that sponsorship of an application to amend the Zoning Ordinance would be consistent with the needs and general welfare of citizens that desire to participate in the National Flood Insurance Program;

NOW, THEREFORE, BE IT RESOLVED by the York County Board of Supervisors this the ____ day of _____, 2014, that an application be, and it is hereby, sponsored and referred to the Planning Commission to allow consideration of proposed amendments to Section 24.1-373 of Chapter 24.1, Zoning, of the York County Code to read as set forth below;

BE IT FURTHER RESOLVED that Planning Commission be, and it is hereby, directed to conclude its review of the proposed amendments and determine its recommendation concerning approval, approval with modifications, or disapproval no later than its October 8, 2014 meeting.

Amend Section 24.1-373 to read as follows:

Sec. 24.1-373. FMA-Floodplain management area overlay district.

- (a) *Statement of intent.* The requirements set forth in this section are ~~is ordinance is~~ adopted pursuant to the authority granted to localities by Va. Code § 15.2 - 2280. In accordance with the objectives of the comprehensive plan, these regulations are intended to ensure the health, safety and general welfare of the public by ensuring that inhabitants and property within the areas designated as flood hazard areas are safe from damage due to flooding and that development actions will not endanger others. This section complies with the requirements of the National Flood Insurance Program (44 CFR 60.3, et seq.) administered by the Federal Emergency Management Agency and is necessary to ensure that all property owners within the county are eligible for participation in the National Flood Insurance Program regular program and thereby able to secure such insurance at nominal rates.

The purpose of these provisions is to prevent: the loss of life and property, the creation of health and safety hazards, the disruption of commerce and governmental services, the extraordinary and unnecessary expenditure of public funds for flood protection and relief, and the impairment of the tax base by:

- (1) regulating uses, activities, and development which, alone or in combination with other existing or future uses, activities, and development, will cause unacceptable increases in flood heights, velocities, and frequencies;
- (2) restricting or prohibiting certain uses, activities, and development from locating within areas subject to flooding;
- (3) requiring all those uses, activities, and developments that do occur in flood-prone areas to be protected and/or flood-proofed against flooding and flood damage; and,
- (4) protecting individuals from buying land and structures which are unsuited for intended purposes because of flood hazards.

- (b) *Applicability.*

- (1) The special provisions established in this section shall apply to the areas designated as Special Flood Hazard Areas as determined by the Flood Insurance Study (FIS) and as delineated on the Flood Insurance Rate Map (FIRM) for York County prepared by the Federal Emergency Management Agency, Federal Insurance Administration dated ~~June 16, 2009~~ January 16,

[2015](#), as amended, and including the Special Floodplain zone, the Approximated Floodplain zone, the Coastal Floodplain zone, and the Coastal High Hazard zone.

- a. The Special Floodplain zones shall be those areas identified as either an AE or A1-30 Zone on the Flood Insurance Rate Map (FIRM) for which one hundred (100)-year flood elevations have been provided but for which no floodway has been delineated.
- b. The Approximated Floodplain zones shall be those areas identified as an A or A99 Zone on the Flood Insurance Rate Map (FIRM). In these zones, no detailed flood profiles or elevations are provided, but the one hundred (100)-year floodplain boundary has been approximated.
- c. The Coastal Floodplain zones shall be those areas identified as a coastal AE zones on the Flood Insurance Rate Map (FIRM) that are subject to wave height between 1.5 feet and 3 feet, and identified on the FIRM as areas of Limits of Moderate Wave Action (LiMWA). Flood elevations are provided in these tidal floodplains; however, floodway data is not applicable.
- d. The Coastal High Hazard zones shall be those areas identified as VE, or VZones on the Flood Insurance Rate Map (FIRM).

The Flood Insurance Rate Map (FIRM) is declared to be a part of this [chapter ordinance](#) and an official copy thereof shall be maintained in the Geographic Information System offices with copies also being maintained in the offices of the zoning administrator and building official.

- (2) These special provisions shall supplement the regulations of the zoning district within which a subject property is located. The floodplain [zones districts](#) described herein shall be an overlay to the existing underlying zoning districts.
- (3) Where these regulations are at variance with the general regulations of this chapter, the specific regulations of the zoning district within which the property is located, or other provisions of this Code, the most restrictive regulation shall apply.
- (4) Any changes to the data contained in either the Flood Insurance Study or the Flood Insurance Rate Map as a result of natural or man-made conditions or subsequent study and analysis shall require the approval of the Federal Insurance Administrator prior to implementation. Evidence of such approval shall require the filing with the zoning administrator of one of the following:

- a. Letter of Map Amendment (LOMA)
- b. Letter of Map Revision (LOMR)
- c. Physical Map Revision

In all cases, the burden of proof shall be on the applicant requesting a map or data change.

- (5) No land shall hereafter be developed and no structure shall be located, relocated, constructed, reconstructed, enlarged, or structurally altered within the floodplain management overlay district except in full compliance with the terms and provisions of this section. All uses, activities, and development occurring within any floodplain management overlay district shall be undertaken only upon the issuance of a zoning certificate, as described in section 24.1-107 of this chapter. Such development shall be undertaken only in strict compliance with the provisions of this section and all other applicable codes and ordinances, such as the Virginia Uniform Statewide Building Code, the York County Subdivision Ordinance (Chapter 20.5, York County Code), and other applicable state and federal laws.
- (6) All applications for development and building permits in the FMA overlay district shall incorporate the following information:
 - a. For structures to be elevated, the elevation of the lowest floor (including basement);
 - b. For structures to be floodproofed (non-residential only), the elevation to which the structure will be floodproofed;
 - c. The elevation of the one hundred (100)-year flood (base flood elevation);
 - d. Topographic information showing existing and proposed ground elevations; and
 - e. Within [Coastal A and V-Zones](#), information obtained and recorded on the permit application shall include the elevation (in relation to mean sea level) of the bottom of the lowest horizontal structural member of the lowest floor (excluding pilings and columns) of all new and substantially improved structures, and whether or not such structures contain a basement.

(7) The degree of flood protection sought by the provisions of this section is considered reasonable for regulatory purposes and is based on acceptable engineering methods of study, but does not imply total flood protection. More severe floods may occur on rare occasions. Flood heights may be

increased by man-made or natural causes, such as ice jams or channel openings restricted by debris. These provisions do not imply that areas outside the FMA district or land uses permitted within such district will be free from flooding or flood damages.

(8) The provisions set forth in this section shall not create liability on the part of the County or any officer or employee thereof for any flood damages that result from reliance on these provisions or any administrative decision lawfully made thereunder.

(c) For the purposes of this section, the following terms shall have the following meanings:

Base flood. The flood having a one percent (1%) chance of being equaled or exceeded in any given year, or that is likely to occur once every one hundred (100) years.

Base flood elevation (BFE). The Federal Emergency Management Agency designated one-hundred-year water surface elevation. The water surface elevation of the base flood relates to the datum specified as shown on the Flood Insurance Rate Map (FIRM) published by the National Flood Insurance Program.

Basement. As used in this section, a basement shall be defined as any part of any structure where the floor is below ground level on all sides.

Breakaway wall. 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 supporting foundation.

Channel. A perceptible natural or artificial waterway which periodically or continuously contains moving water confined to a definite bed and banks.

~~*Coastal high hazard A zone.*—A special flood hazard area 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.~~
Flood hazard areas that have been delineated as subject to wave heights between 1.5 feet and 3 feet.

Development. Any man-made change to improved or unimproved real estate, including, but not limited to, buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations, and the storage of materials and equipment.

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

Encroachment. 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. Structures for which the “start of construction” commenced before the effective date of the FIRM. “Existing construction” may also be referred to as “existing structures”

Flood or flooding.

1. A general and temporary condition of partial or complete inundation of normally dry land areas from:
 - overflow of inland or tidal waters, or
 - the unusual and rapid accumulation or run-off of surface waters from any source, or the unusual and rapid accumulation or run-off of surface waters from any source, or mudflows which are proximately caused by flooding or precipitated by accumulations of water on or under the ground and are akin to a river of liquid and flowing mud on the surfaces of normally dry land areas, as when earth is carried by a current of water and deposited along the path of the current.
2. The collapse or subsidence of land along the shore of a lake or other body of water as a result of erosion or undermining caused by water or currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually high water level in a natural body of water, accompanied by a severe storm, or by an unanticipated force of nature, such as a flash flood or by some similarly unusual and unforeseeable event which results in flooding as defined above.

Flood, 100-Year. A flood level with a one-percent (1%) or greater chance of being equaled or exceeded in any year. Also referred to as base flood.

Flood hazard zone. The delineation of special flood hazard areas into insurance risk and rate classifications on the Flood Insurance Rate Map (FIRM) published by the Federal Emergency Management Agency and which include the following zones and criteria:

- *Zone A.* Areas subject to inundation by the 100-Year Flood where detailed analyses have not been performed and base flood elevations are not shown.
- *Zone AE.* Areas subject to inundation by the 100-Year Flood as determined by detailed methods with base flood elevations shown within each area.

- *Zone VE.* Areas along coastal regions subject to additional hazards associated with storm wave and tidal action as well as inundation by the 100-Year Flood.
- *Zone X.* Areas located above the 100-Year Flood boundary and having moderate or minimal flood hazards.

Flood Insurance Rate Map (FIRM). The official map of York County, on which the Federal Emergency Management Agency has delineated both the special hazard areas and the risk premium zones applicable to the community. A FIRM that has been made available digitally is called a Digital Flood Insurance Rate Map (DFIRM).

Flood Insurance Study (FIS). A report by FEMA that examines, evaluates and determines flood hazards and, if appropriate, corresponding water surface elevations, or an examination, evaluation and determination of mudflow and/or flood related erosion hazards.

Floodplain administrator. The individual designated by the County Administrator to administer and ensure compliance with the terms of the FMA provisions set forth herein.

Floodplain or flood-prone area. A land area which is susceptible to being inundated by a flood. Floodplain areas are generally adjacent to a river, stream, bay, lake, watercourse, or storm drainage facility.

Floodplain management area. A land area located within a Flood Hazard Zone or which has been designated by the County and to which the provisions of this section apply.

Floodproof. Any combination of structural and non-structural additions, changes, or adjustments to structures which reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures and their contents. A construction method designed to ensure that all parts of a structure or facility located below the base flood elevation are watertight with walls impermeable to the passage of water and with structural components having the capability of withstanding hydrostatic and hydrodynamic loads and the effects of buoyancy.

Freeboard. A factor of safety usually expressed in feet above a flood level for purposes of floodplain management. “Freeboard” is required in order to compensate for the many unknown factors that could contribute to flood heights greater than the height calculated for a selected size flood and floodway conditions, such as wave action, bridge openings, and the hydrological effect of urbanization in the watershed.

Highest adjacent grade. The highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.

Historic structure. Any structure that is:

1. 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;
2. certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;
3. individually listed on the Virginia a-state inventory of historic places ~~in states with historic preservation programs which have been approved by the Secretary of the Interior;~~ or,
4. individually listed on a local inventory of historic places ~~in communities with historic preservation programs~~ that has have been certified by the Virginia Department of Historic Resources. ~~either:~~
 - a. ~~by an approved state program as determined by the Secretary of the Interior or,~~
 - b. ~~directly by the Secretary of the Interior in states without approved programs.~~

Hydrologic and Hydraulic Engineering Analysis. *Analyses performed by a licensed professional engineer, in accordance with standard engineering practices that are accepted by the Virginia Department of Conservation and Recreation and FEMA, used to determine the base flood, other frequency floods, flood elevations, floodway information and boundaries, and flood profiles.*

Letters of Map Change (LOMC) *A Letter of Map Change is an official FEMA determination, by letter, that amends or revises an effective Flood Insurance Rate Map or Flood Insurance Study. Letters of Map Change include*

- Letter of Map Amendment (LOMA): An amendment based on technical data showing that a property is incorrectly included in a designated special flood hazard area. A LOMA amends the current effective FIRM and establishes that a land as defined by metes and bounds or structure is not located in a special flood hazard area.
- Letter of Map Revision (LOMR): A revision based on technical data that may show changes to flood zones, flood elevations, floodplain and floodway delineations, and planimetric features. A letter of Map Revision Based on Fill (LOMR-F), is a determination that a structure or parcel of land has

been elevated by fill above the base flood elevation and is, therefore, no longer exposed to flooding associated with the base flood. In order to qualify for this determination, the fill must have been permitted and placed in accordance with York County's floodplain management regulations.

- Conditional Letter of Map Revision (CLOMR): A formal review and comment as to whether a proposed flood protection project or other project complies with the minimum NFIP requirement for such projects with respect to delineation of special flood hazard areas. A CLOMR does not revise the effective FIRM or FIS.

Lowest floor. The lowest floor of the lowest enclosed area (including basement). An unfinished or flood-resistant enclosure, usable solely for parking of vehicles, building access or storage in an area other than a basement area, is not considered a building's lowest floor, provided that such enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of Federal Code 44CFR, Section 60.3.

Manufactured home. The provisions of section 24.1-104, *Definitions* of this chapter notwithstanding, for purposes of this section, a manufactured home shall be defined as a structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when connected to the required utilities. Also included within this definition shall be park trailers, travel trailers, and other similar vehicles placed on a site for more than one hundred eighty (180) consecutive days, excluding however, those such vehicles stored on a property and not used for their intended purposes.

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

Mean sea level. ~~National Geodetic Vertical Datum (NGVD) of 1929~~North American Vertical Datum of 1988 to which all elevations on the FIRM and within the Flood Insurance Study are referenced.

New construction. For the purposes of determining insurance rates, structures for which the "start of construction" commenced on or after the effective date of the initial Flood Insurance Rate Map (December 16, 1988), and ~~include~~includes any subsequent improvement to such structures. For floodplain management purposes, new construction means structures for which start of construction commenced on or after the effective date of a floodplain management regulation adopted by a community and includes any subsequent improvements to such structure.

Post-FIRM structures. A structure for which construction or substantial improvement occurred after December 16, 1988.

Pre-FIRM structures. A structure for which construction or substantial improvement occurred on or before December 16, 1988.

Recreational vehicle. The provisions of section 24.1-104, *Definitions* of this chapter notwithstanding, for purposes of this section, a recreational vehicle is one which is:

1. built on a single chassis;
2. 400 square feet or less when measured at the largest horizontal projection;
3. designed to be self-propelled or permanently towable by light duty truck; and
4. designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational camping, travel or seasonal use.

Repetitive Loss structure. A building covered by a contract for flood insurance that has incurred flood-related damages on two occasions during a 10-year period ending on the date of the event for which a second claim is made, in which the cost of repairing the flood damage, on the average, equaled or exceeded 25 percent of the market value of the building at the time of each flood event.

Sand dune. Naturally occurring accumulations of sand in ridges or mounds landward of the beach.

Shallow flooding area., A special flood hazard area 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.

Special flood hazard area. The land in the floodplain subject to a one (1%) or greater chance of being flooded in any given year.

Start of construction. For other than new construction and substantial improvement, under the Coastal Barriers Resource Act (P.L..97-348), means tThe date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, placement, substantial improvement or other improvement was within 180 days of the permit date. ~~If not within 180 days, then it shall be the date that the work actually started.~~ The actual start means either the first placement of permanent construction on a site, such as the pouring of the slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling, 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 structure. For a substantial improvement, the actual start of the

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. For floodplain management purposes, a walled and roofed building, a gas or liquid storage tank, that is principally above ground, or a manufactured home.

Substantial damage. 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 (50%) of the market value of the structure before the damage occurred.

Substantial improvement. Any repair, reconstruction, rehabilitation, addition, or improvement of a structure, the cost of which equals or exceeds fifty percent (50%) of the market value of the structure before the “start of construction” of the improvement. This term includes structures which have incurred “substantial damage” regardless of the actual repair work performed. The term does not, however, include either:

- Any alteration of an “historic structure,” provided that the alteration will not preclude the structure’s continued designation as an “historic structure.”
- Any project for improvement of a structure to correct existing violations of Virginia or county health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to ensure safe living conditions.

Violation. The failure of a structure or other development to be fully compliant with the County’s floodplain management regulations.

Watercourse. A natural or artificial channel for the passage of running water fed from natural sources in a definite channel and discharging into some stream or body of water.

- (d) *Use Regulations.* Permitted uses, specially permitted uses, accessory uses, dimensional standards, and special requirements shall be as established by the underlying zoning district, except as specifically modified herein.
- (1) The following uses shall be specifically prohibited within the Floodplain Management Areas overlay district:
- a. Landfills, junkyards, outdoor storage of inoperative vehicles.
 - b. Manufactured homes, except in an existing manufactured home (mobile 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, elevation, and encroachment standards are met

- c. Surface mines and borrow pits
- d. Manufacture, bulk storage, transformation or distribution of petroleum, chemical or asphalt products or any hazardous materials as defined in either or both of the following:
 - 1. Superfund Amendment and Reauthorization Act of 1986
 - 2. Identification and Listing of Hazardous Wastes, 40 C.F.R. §261 (1987)

The following products shall be specifically included:

- a) Oil and oil products including petrochemicals
 - b) Radioactive materials
 - c) Any material transported or stored in large commercial quantities (such as 55-gallon drums) which is a very soluble acid or base, causes abnormal growth of an organ or organism, or is highly biodegradable, exerting a strong oxygen demand
 - d) Biologically accumulative poisons
 - e) Substances containing the active ingredients of economic poisons that are or were ever registered in accordance with the provisions of the Federal Insecticide, Fungicide, and Rodenticide Act, as amended (7 USC 135 et seq.)
 - f) Substances highly lethal to mammalian or aquatic life
- e. Storage or land application of industrial wastes
 - f. Outdoor storage of equipment, materials, or supplies which are buoyant, flammable, or explosive.

g. The storage of Acetylene gas containers, Storage tanks, Gasoline, Charcoal/coal dust, and petroleum products for any time period longer than 30 days shall be prohibited in the 100 year floodplain.

h. The storage of Acetone, ammonia, benzene, calcium carbide, carbon disulfide, celluloid, chlorine, hydrochloric acid, magnesium, nitric

acid, oxides of nitrogen, phosphorus, potassium, prussic acid, sodium, and sulfur for any time period longer than 30 days shall be prohibited in the 500-year floodplain.

- (2) The provisions of article VIII. *Nonconforming Uses* of this chapter notwithstanding, no expansion of any of the above uses located within the Floodplain Management Area overlay district shall be permitted.
- (3) All recreational vehicles placed on sites within the Floodplain Management Area overlay district must either:
 - a. be on the site for fewer than 180 consecutive days; or
 - b. 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,
 - c. meet all the requirements for manufactured homes as specified in this chapter.

(4) Space Below the Lowest Floor

In zones A and AE, fully enclosed areas of new construction or substantially improved structures which are below the regulatory flood protection elevation shall:

1. not be designed or used for human habitation, but shall only be used for parking of vehicles, building access, or limited storage of maintenance equipment used in connection with the premises. Access to the enclosed area shall be the minimum necessary to allow for parking of vehicles (garage door) or limited storage of maintenance equipment (standard exterior door), or entry to the living area (stairway or elevator).
2. be constructed entirely of flood resistant materials below the regulatory flood protection elevation;
 1. include measures to automatically equalize hydrostatic flood forces on walls by allowing for the entry and exit of floodwaters. To meet this requirement, the openings must either be certified by a professional engineer or architect or meet the following minimum design criteria:
 - a. Provide a minimum of two openings on different sides of each enclosed area subject to flooding.

- b. The total net area of all openings must be at least one (1) square inch for each square foot of enclosed area subject to flooding.
- c. If a building has more than one enclosed area, each area must have openings to allow floodwaters to automatically enter and exit.
- d. The bottom of all required openings shall be no higher than one (1) foot above the adjacent grade.
- e. Openings may be equipped with screens, louvers, or other opening coverings or devices, provided they permit the automatic flow of floodwaters in both directions.
- f. Foundation enclosures made of flexible skirting are not considered enclosures for regulatory purposes, and, therefore, do not require openings. Masonry or wood underpinning, regardless of structural status, is considered an enclosure and requires openings as outlined above.

(e) *Special standards and requirements.*

- (1) *Standards for subdivisions.* Preliminary plans, development plans and final subdivision plats of all properties, all or part of which are located within any special flood hazard area, must be prepared and sealed by a licensed surveyor or engineer. The following information, in addition to that which would otherwise be required, shall be provided on the respective plans:
 - a. The 100-Year Flood boundary, as depicted on the FIRM and the flood hazard zone classification(s) shall be depicted on preliminary plans, development plans, and final plats.
 - b. Development plans shall provide topographical information for the site at a maximum contour interval of two feet (2'), provided, however, that a one foot (1') contour interval for elevations one foot (1') lesser and one foot (1') greater than the 100-Year Flood boundary shall be shown.
 - c. The elevation of the finished surface of the ground at each corner of each existing building located within any special flood hazard area shall be shown on development plans and final plats.
 - d. For subdivision proposals and other proposed development proposals (including manufactured home parks and subdivisions) that exceed fifty lots or five acres, whichever is the lesser, base flood elevation data shall be obtained from other sources or developed using

detailed methodologies, and hydraulic and hydrologic analysis; comparable to those contained in a Flood Insurance Study. .

- (2) *Standards for site plans.* Site plans for development of all properties, all or part of which are located within any special Flood hazard area, must be prepared and sealed by a licensed surveyor or engineer and include the following information in addition to that which would otherwise be required:
- a. The 100-Year Flood boundary, as depicted on the FIRM and the flood hazard zone classification(s).
 - b. Topographical information for the site provided at a maximum contour interval of two feet (2'), provided, however, that a one foot (1') contour interval shall be required for elevations one foot (1') lesser and one foot (1') greater than the 100-Year Flood boundary and the boundary itself shall be shown.
 - c. The elevation of the finished surface of the ground at each corner of each existing or proposed building location within any flood hazard zone.

- (3) *Standards for utilities.* All new or replacement utilities, water filtration, and wastewater treatment facilities, installed in a floodplain management area shall be designed to prevent the infiltration of floodwaters into or discharge from such utilities and to minimize the potential for flood damage.

Where private waste disposal systems are to be installed or replaced, they shall be installed so that they will not be permanently contaminated or impaired by a base flood.

- (4) *Standards for streets and roads.* The finished centerline elevation of all new public or private streets shall be no lower than six and one-half feet (6½') above mean sea level (NGVD) provided, however, that where an existing street not meeting this criterion is to be extended, the zoning administrator may approve streets or parts thereof which are below this elevation, but not lower than the elevation of the existing street.

- (5) *Standards for filling of floodplain management areas.*

- a. Where fill within the floodplain management area is proposed, the following minimum standards shall apply:
 1. Fill areas shall extend laterally a minimum of fifteen feet (15') beyond building lines from all points.
 2. Fill material shall consist only of soil and small rock materials which can pass through a three-inch (3") opening ASTM

standard sieve. Organic materials, including tree stumps and asphalt rubble, shall be prohibited.

3. Fill areas shall be compacted as may be specified by the zoning administrator to provide necessary permeability and resistance to erosion, scouring, or settling.
4. Fill areas shall be graded to a finished slope of no steeper than one (1) vertical to three (3) horizontal, unless substantiated data, certified by a licensed engineer, which justifies steeper slopes is submitted to and approved by the zoning administrator.
5. The zoning administrator shall impose any additional standards deemed necessary to ensure the safety of the community and properties from additional flood hazard potentials caused by filling within the floodplain management area.
 - b. Filling or any other encroachment into any channel within the floodplain management area which would, as determined by the zoning administrator, obstruct or unduly restrict water flows through the channel and, in so doing, increase the potential for flood damage shall be prohibited.
 - c. The filling of any portion of property solely to increase the elevation of the land to meet minimum lot area requirements and thereby create a buildable lot for residential construction within the floodplain management area shall be prohibited.
 - d. These standards may be waived individually by the zoning administrator, upon the recommendation of the wetlands board for approved parks, recreation facilities, shoreline erosion control and beach maintenance projects where sufficient data is presented justifying the project and where it is demonstrated that such actions will not increase flood levels on any properties.

- | (6) *Standards for watercourse modification.* Watercourses shall not be altered or relocated except upon the presentation of data, certified by a licensed engineer, that the flood-carrying capacity of such a modified watercourse will be at least equal to that prior to modification. Prior to any proposed alteration of any channels or of any watercourse or stream within the Floodplain Management Area overlay district, necessary permits shall be obtained from the Army Corps of Engineers, the Virginia Department of Environmental Quality, and the Virginia Marine Resources Commission. Furthermore, notification of the proposal shall be given by the applicant to all affected adjacent jurisdictions, the Department of Conservation and Recrea-

tion (Division of Dam Safety and Floodplain Management) and the Federal Insurance Administration.

- (7) *Construction standards for properties in Zone AE.* All new construction or substantial improvement in Zone AE of the floodplain management area shall occur in accordance with the applicable floodplain construction provisions for Zone AE contained in the Virginia Uniform Statewide Building Code. The floodplain zoning administrator shall be satisfied that all applicable provisions have been complied with prior to issuing building permits or temporary or permanent certificates of occupancy.

In addition, the following standards shall apply:

- a. All new and replacement electrical equipment, and heating, ventilating, air conditioning and other service facilities be installed with a freeboard at least ~~one and one-half feet (1½')~~ three feet (3') above the base flood elevation or otherwise designed and located so as to prevent water from entering or accumulating within the system.
- b. All electrical distribution panels be installed with a freeboard at least three feet (3') above the base flood elevation or otherwise designed and located so as to prevent inundation.
- c. The elevation of the lowest floor of any residential~~the~~ structure, including basements, shall be constructed with a freeboard at least ~~one and one-half feet (1½')~~ three feet (3') above the base flood elevation. ~~or, in the case of Non-residential structures, may be flood-proofed in lieu of being elevated provided that all areas of the building components below the elevation corresponding to the BFE plus one foot 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, including the specific elevation (in relation to mean sea level) to which such structures are flood-proofed, shall be maintained by the Division of Building Regulation.~~

In addition to the above, on property within the Coastal Floodplain zones identified as Coastal AE Zones on the Flood Insurance Rate Map (FIRM) that is subject to wave height between 1.5 feet and 3 feet, and which is identified on the FIRM as being within the **Limits of Moderate Wave Action (LimWA)**, buildings and structures shall have the lowest floor elevated to provide at least one (1) additional foot of freeboard (i.e., 4 feet)

- (8) *Construction standards for properties in Zone VE.* All new construction or substantial improvement in Zone VE of the floodplain management area

shall occur in accordance with the applicable floodplain construction provisions for Zone VE contained in the Virginia Uniform Statewide Building Code. The [floodplain zoning](#) administrator shall be satisfied that all applicable provisions have been complied with prior to issuing building permits or temporary or permanent certificates of occupancy. In addition, the following standards shall apply:

- a. All new construction or development shall be located landward of the reach of the mean high tide.
- b. Any man-made alteration of a sand dune or any part thereof shall be prohibited.
- c. No structure or any part thereof may be constructed on fill material of any kind.
- d. All new and replacement electrical equipment, and heating, ventilating, air conditioning and other service facilities be installed with a freeboard at least three feet (3') above the base flood elevation or otherwise designed and located so as to prevent water from entering or accumulating within the system.
- e. All electrical distribution panels be installed with a freeboard at least six feet (6') above the base flood elevation or otherwise located so as to prevent inundation.
- f. The elevation of the bottom of the lowest horizontal structural member of the lowest floor of the structure, excluding pilings or columns, shall be constructed with a freeboard at least three feet (3') above the base flood elevation. [Non-residential structures may be flood-proofed in lieu of being elevated provided that all areas of the building components below the elevation corresponding to the BFE plus one foot 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, including the specific elevation \(in relation to mean sea level\) to which such structures are flood-proofed, shall be maintained by the Division of Building Regulation.](#)

[In addition to the above, on property within the Coastal Floodplain zones identified as Coastal VE Zones on the Flood Insurance Rate Map \(FIRM\) that is subject to wave height between 1.5 feet and 3 feet, and which is identified on the FIRM as being within the **Limits of Moderate Wave Action \(LiMWA\)**, buildings and structures shall have the lowest floor elevated to provide at least one \(1\) additional foot of freeboard \(i.e., 4 feet\)](#)

(9) *Construction standards for properties in Zone A.* All new construction or substantial improvements in Zone A must comply with all standards applicable to Zone AE contained in this section and the floodplain construction provisions of the Virginia Uniform Statewide Building Code. In addition, the owner and developer of such property shall provide to the floodplain zoning administrator sufficiently detailed hydrologic and hydraulic analyses, certified by a licensed engineer, to determine the base flood elevation for the property and the location of the 100-Year Flood Boundary. Upon approval by the floodplain zoning administrator, copies of all such detailed analyses shall be transmitted to the Federal Insurance Administrator for incorporation into the FIRM.

(10) Historic structures undergoing repair or rehabilitation that would constitute a substantial improvement as defined above, must comply with all ordinance requirements that do not preclude the structure's continued designation as a historic structure. Documentation that a specific ordinance requirement will cause removal of the structure from the National Register of Historic Places or the State Inventory of Historic Places must be obtained from the Secretary of the Interior or the State Historic Preservation Officer. Any exemption from ordinance requirements will be the minimum necessary to preserve the historic character and design of the structure.

(11) Elevation certificates A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required by the provisions set forth herein shall be presumed to be in violation until such time as that documentation is provided.

(102) Under no circumstances shall any use, activity, and/or development adversely affect the capacity of the channels or floodway of any watercourse, drainage ditch, or any other drainage system or facility.

(f) Submitting Technical Data The floodplain administrator shall monitor physical changes in the County that could potentially cause base flood elevations to increase or decrease and affect flooding conditions. As soon as practicable, but not later than six months after the date such information becomes available, the floodplain administrator shall notify the Federal Emergency Management Agency of the changes by submitting technical or scientific data. Such a submission is necessary so that upon confirmation of those physical changes affecting flooding conditions, risk premium rates and flood plain management requirements will be based upon current data.

(g) Administration. Records of actions associated with administering this ordinance shall be kept on file and maintained by the Office of Building Regulations. The Floodplain Administrator shall have the following duties and responsibilities:

- (1) Review applications for permits to determine whether proposed activities will be located in the Special Flood Hazard Area (SFHA).
- (2) Interpret floodplain boundaries and provide available base flood elevation and flood hazard information.
- (3) Review applications to determine whether proposed activities will be reasonably safe from flooding and require new construction and substantial improvements to meet the requirements of these regulations.
- (4) Review applications to determine whether all necessary permits have been obtained from the Federal, State or local agencies from which prior or concurrent approval is required; in particular, permits from state agencies for any construction, reconstruction, repair, or alteration of a dam, reservoir, or waterway obstruction (including bridges, culverts, structures), any alteration of a watercourse, or any change of the course, current, or cross section of a stream or body of water, including any change to the 100-year frequency floodplain of free-flowing non-tidal waters of the State.
- (5) Verify that applicants proposing an alteration of a watercourse have notified adjacent communities, the Department of Conservation and Recreation (Division of Dam Safety and Floodplain Management), and other appropriate agencies (VADEQ, USACE) and have submitted copies of such notifications to FEMA.
- (6) Approve applications and issue permits to develop in flood hazard areas if the provisions of these regulations have been met, or disapprove applications if the provisions of these regulations have not been met.
- (7) Inspect or cause to be inspected, buildings, structures, and other development for which permits have been issued to determine compliance with these regulations or to determine if non-compliance has occurred or violations have been committed.
- (8) Review Elevation Certificates and require incomplete or deficient certificates to be corrected.
- (9) Submit to FEMA, or require applicants to submit to FEMA, data and information necessary to maintain FIRMs, including hydrologic and hydraulic engineering analyses prepared by or for the (community), within six months after such data and information becomes available if the analyses indicate changes in base flood elevations.
- (10) Maintain and permanently keep records that are necessary for the administration of these regulations, including:

- a. Flood Insurance Studies, Flood Insurance Rate Maps (including historic studies and maps and current effective studies and maps) and Letters of Map Change; and
 - b. Documentation supporting issuance and denial of permits, Elevation Certificates, documentation of the elevation (in relation to the datum on the FIRM) to which structures have been flood-proofed, other required design certifications, variances, and records of enforcement actions taken to correct violations of these regulations.
- (11) Enforce the provisions of these regulations, investigate violations, issue notices of violations or stop work orders, and require permit holders to take corrective action.
- (12) Advise the Board of Zoning Appeals regarding the intent of these regulations and, for each application for a variance, prepare a staff report and recommendation.
- (13) Administer the requirements related to proposed work on existing buildings:
- a. Make determinations as to whether buildings and structures that are located in flood hazard areas and that are damaged by any cause have been substantially damaged.
 - b. Make reasonable efforts to notify owners of substantially damaged structures of the need to obtain a permit to repair, rehabilitate, or reconstruct, and prohibit the non-compliant repair of substantially damaged buildings except for temporary emergency protective measures necessary to secure a property or stabilize a building or structure to prevent additional damage.
- (14) Undertake, as determined appropriate due to the circumstances, other actions which may include but are not limited to: issuing press releases, public service announcements, and other public information materials related to permit requests and repair of damaged structures; coordinating with other Federal, State, and local agencies to assist with substantial damage determinations; providing owners of damaged structures information related to the proper repair of damaged structures in special flood hazard areas; and assisting property owners with documentation necessary to file claims for Increased Cost of Compliance (ICC) coverage under NFIP flood insurance policies.
- (15) Notify the Federal Emergency Management Agency when the corporate boundaries of the (community) have been modified and:

- a. Provide a map that clearly delineates the new corporate boundaries or the new area for which the authority to regulate pursuant to these regulations has either been assumed or relinquished through annexation; and
 - b. If the FIRM for any annexed area includes special flood hazard areas that have flood zones that have regulatory requirements that are not set forth in these regulations, prepare amendments to these regulations to adopt the FIRM and appropriate requirements, and submit the amendments to the governing body for adoption; such adoption shall take place at the same time as or prior to the date of annexation and a copy of the amended regulations shall be provided to Department of Conservation and Recreation (Division of Dam Safety and Floodplain Management) and FEMA.
- (16) Upon the request of FEMA, complete and submit a report concerning participation in the NFIP which may request information regarding the number of buildings in the SFHA, number of permits issued for development in the SFHA, and number of variances issued for development in the SFHA.
- (17) Ensure that flood, mudslide, and flood-related erosion hazards, to the extent that they are known, are taken into account in all official actions relating to land management and use throughout the entire County, whether or not those hazards have been specifically delineated geographically (e.g. via mapping or surveying).
- (h) Severability. If any subsection, paragraph, sentence, clause, or phrase of this section shall be declared invalid for any reason whatever, such decision shall not affect the remaining portions of this section. The remaining portions shall remain in full force and effect; and for this purpose, the provisions herein are hereby declared to be severable.
- (i) Violations. Violations of any of the terms of this section shall be pursued in accordance with the provisions of Section 24.1-109, Administration, enforcement, and penalties, of this Chapter and Article VI, Violations and penalties, of Chapter 7.1, Building Regulations.
- (j) *Variances.* Variances from the provisions of this section may be granted by the board of zoning appeals in accordance with the provisions of article IX of this chapter except that the board of zoning appeals shall notify all applicants, in writing, that the issuance of a variance to construct a structure below the base flood level will result in increased premium rates for flood insurance and that such construction increases risks to life and property, both their own and others. A record shall be maintained of the above notification as well as all variance actions, including justification for the issuance of the variances. Any variances that are issued shall be noted in the annual or biennial report submitted to the Federal Insurance Administrator.

- (1) Variances shall be issued only after the board of zoning appeals has determined that:
 - a. there is good and sufficient cause;
 - b. failure to grant the variance would result in exceptional hardship to the applicant; and
 - c. that the granting of the variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public, or conflict with local laws or ordinances.
- (2) Variances shall be issued only after the board of zoning appeals has determined that the variance will be the minimum required to provide relief from exceptional hardship to the applicant.
- (3) Variances shall not be issued for any proposal located within a designated regulatory floodway if any increase in flood levels during the base flood discharge would result.

Nothing in this section shall be construed to supersede any requirements or procedures specified by the Virginia Uniform Statewide Building Code.