

(a) *General Provisions.*

- (1) *Statutory authorization and purpose.* This section is adopted pursuant to the authority granted to localities by Section 15.2 - 2280 of the Virginia Code (1950), as amended. 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 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; restricting or prohibiting certain uses, activities, and development from locating within districts subject to flooding; requiring all those uses, activities, and developments that do occur in flood-prone districts to be protected and/or flood-proofed against flooding and flood damage; and protecting individuals from buying land and structures which are unsuited for intended purposes because of flood hazards.
- (2) *Applicability.* These provisions shall apply to all privately and publicly owned lands within the jurisdiction of the City and identified as areas of special flood hazard determined by the City or shown on the flood insurance rate map (FIRM) or included in the flood insurance study (FIS) that are provided to the City by Federal Emergency Management Agency (FEMA).
- (3) *Compliance and liability.* No land shall hereafter be developed and no structure shall be located, relocated, constructed, reconstructed, enlarged, or structurally altered except in full compliance with the terms and provisions of this section and any other applicable sections and regulations which apply to uses within the jurisdiction of this section.

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. Larger floods may occur on rare occasions. Flood heights may be increased by man-made or natural causes, such as ice jams and bridge openings restricted by debris. This section does not imply that districts outside the floodplain district or land uses permitted within such district will be free from flooding or flood damages.

This section shall not create liability on the part of the City or any officer or employee thereof for any flood damages that result from reliance on this section or any administrative decision lawfully made thereunder.

- (4) *Records.* Records of actions associated with administering this section shall be kept on file and maintained by or under the direction of the Zoning Administrator in perpetuity.
- (5)

Abrogation and greater restrictions. To the extent that the provisions are more restrictive, this section supersedes any section currently in effect in flood-prone districts. To the extent that any other existing law or regulation is more restrictive or does not conflict with this section, it shall remain in full force and effect.

These regulations are not intended to repeal or abrogate any existing sections including subdivision regulations, zoning ordinances or building codes. In the event of a conflict between these regulations and any other ordinance or section, the more restrictive shall govern.

(6) *Severability.* If any section, 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 of this section are hereby declared to be severable.

(7) *Penalty for violations.* Section 36.2-571 of the City Code contains the provisions for enforcement of this section and penalties that apply for violations.

(b) *Definitions.* Certain terms and words used in this section shall be defined as set forth below.

Where any conflict exists between the definitions below and those set forth in Appendix A, the definitions of this subsection shall govern for the purposes of the regulations of this section.

Appurtenant or accessory structure: Accessory structures not to exceed two hundred (200) square feet.

Areas of shallow flooding: A special flood hazard area with base flood depths from one (1) to three (3) 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.

Base flood: The flood having a one (1) percent chance of being equaled or exceeded in any given year.

Base flood elevation: The water surface elevations of the base flood, that is, the flood level that has a one (1) percent or greater chance of occurrence in any given year. The water surface elevation of the base flood in relation to the datum specified on the community's flood insurance rate map. For the purposes of this section, the base flood is the one (1) percent annual chance flood.

Basement: Any area of the building having its floor sub-grade (below ground level) on all sides.

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 requirements for such projects with respect to delineation of special flood hazard areas. A CLOMR does not revise the effective flood insurance rate map or flood insurance study.

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 or storage of equipment or materials.

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.

FEMA: Federal Emergency Management Agency.

Flood or flooding:

1. A general or 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; or
 - c. Mudflows which are proximately caused by flooding as defined in paragraph (1)(b) of this definition 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 waves or currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually high water level in a natural body of water, accompanied by a severe storm, or by an unanticipated force of nature such as flash flood or an abnormal tidal surge, or by some similarly unusual and unforeseeable event which results in flooding as defined in paragraph 1 of this definition.

Flood insurance rate map (FIRM): An official map of a community, on which FEMA 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.

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: Any land area susceptible to being inundated by water from any source.

Flood proof: 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.

Floodway: 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 (1) foot at any point within the community.

Freeboard: A factor of safety usually expressed in feet above a flood level for purposes of floodplain management. "Freeboard" tends 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. The City requires base flood elevation plus twenty-four (24) inches freeboard.

Functionally dependent use: A use which cannot perform its intended purpose unless it is located or carried out in close proximity to water. This term includes only docking facilities, port facilities that are necessary for the loading and unloading of cargo or passengers, and shipbuilding and ship repair facilities, but does not include long-term storage or related manufacturing facilities.

Habitable space: A space in a building used or capable of being used for living, sleeping, eating or cooking, or used, or capable of being used, as a home occupation. Bathrooms, toilet rooms, closets, halls, storage or utility spaces and similar areas are not considered habitable spaces.

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 of the Interior to qualify as a registered historic district;
3. 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
4. Individually listed on the city inventory of historic places.

Hydrologic and hydraulic 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.

Letter of map amendment (LOMA): An amendment based on technical data showing that a property was incorrectly included in a designated special flood hazard area. A LOMA amends the current effective Flood Insurance Rate Map 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 the community's floodplain management regulations.

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 Code of Federal Regulations 44 (C.F.R.) 60.3.

Manufactured home: A structure, transportable in one (1) 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. For floodplain management purposes the term "manufactured home" also includes park trailers, travel trailers, and other similar vehicles placed on a site for greater than one hundred eighty (180) consecutive days.

Mean sea level: Is an elevation point that represents the average height of the ocean's surface (such as the halfway point between the mean high tide and the mean low tide) which is used as a standard in determining land elevation.

New construction: For the purposes of determining insurance rates, structures for which the "start of construction" commenced on or after November 4, 1981, and includes any subsequent improvements to such structures. For floodplain management purposes, new construction means structures for which the 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 structures. Such structure is also referred to as "post-FIRM."

Post-FIRM structures: A structure for which construction or substantial improvement occurred on or after November 14, 1981.

Recreational vehicle: A vehicle which is:

1. Built on a single chassis;
2. Four hundred (400) square feet or less when measured at the largest horizontal projection;
3. Designed to be self-propelled or permanently towable by a light duty truck; 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 (2) occasions in a ten (10) year period, in which the cost of the repair, on the average, equaled or exceeded twenty-five (25) percent of the market value of the structure at the time of

each such flood event; and at the time of the second incidence of flood-related damage, the contract for flood insurance contains increased cost of compliance coverage.

Special flood hazard area: The land in the floodplain subject to a one (1) percent or greater chance of being flooded in any given year as determined in subsection (d)(1) of this Section.

Start of construction: For other than new construction and substantial improvement, under the Coastal Barriers Resource Act (P.L. - 97-348), means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, placement, substantial improvement or other improvement was within one hundred eighty (180) days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of 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 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 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, including a gas or liquid storage tank, that is principally above ground, as well as 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 fifty (50) percent of the market value of the structure before the damage occurred.

Substantial improvement: Any reconstruction, rehabilitation, addition, or other improvement of a structure, taking place during a period of five (5) years, the cumulative cost of which equals or exceeds fifty (50) percent of the market value of the structure before the "start of construction" of the improvement. This term includes repetitive loss structures or structures that have incurred substantial damage regardless of the actual repair work performed. The term does not, however, include either:

1. Any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions, or
2. Any alteration of a historic structure, provided that the alteration will not preclude the structure's continued designation as a historic structure.

Violation: The failure of a structure or other development to be fully compliant with the City's floodplain management regulations. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in this section is presumed to be in violation until

such time as that documentation is provided.

Watercourse: 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.

(c) *Administration.*

- (1) *Designation of the Zoning Administrator.* The Zoning Administrator is hereby appointed to administer and implement these regulations. The Zoning Administrator may delegate duties and responsibilities set forth in these regulations to qualified technical personnel, plan examiners, inspectors, and other employees.
- (2) *Duties and Responsibilities of the Zoning Administrator.* The duties and responsibilities of the Zoning Administrator shall include but are not limited to:
 - (A) Review applications for permits to determine whether proposed activities will be located in the special flood hazard area (SFHA).
 - (B) Interpret floodplain boundaries and provide available base flood elevation and flood hazard information.
 - (C) 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.
 - (D) 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.
 - (E) 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 (Virginia Department of Environmental Quality, United States Army Corps of Engineers) and have submitted copies of such notifications to FEMA.
 - (F) 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.
 - (G)

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.

- (H) Review elevation certificates and require incomplete or deficient certificates to be corrected.
- (I) Submit to FEMA, or require applicants to submit to FEMA, required data and information necessary to maintain FIRMs as outlined in item (c)(7) below.
- (J) Maintain and permanently keep records that are necessary for the administration of these regulations, including:
 - (i) Flood Insurance Studies, Flood Insurance Rate Maps (including historic studies and maps and current effective studies and maps) and Letters of Map Change; and
 - (ii) 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 floodproofed, inspection records, other required design certifications, variances, and records of enforcement actions taken to correct violations of these regulations.
- (K) Enforce the provisions of these regulations, investigate violations, issue notices of violations or stop work orders, and require permit holders to take corrective action.
- (L) 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.
- (M) Administer the requirements related to proposed work on existing buildings:
 - (i) 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.
 - (ii) Make reasonable efforts to notify owners of substantially damaged structures of the need to obtain a permit to repair, rehabilitate, or reconstruct. 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.
- (N) Notify FEMA when the corporate boundaries of the City have been modified and:
 - (i) 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
 - (ii) 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.

(3) *Use and interpretation of flood insurance rate maps.* The Zoning Administrator shall make interpretations, where needed, as to the exact location of special flood hazard areas, floodplain boundaries, and floodway boundaries. The following shall apply to the use and interpretation of FIRMs and data:

- (A) Where field surveyed topography indicates that adjacent ground elevations:
 - (i) Are below the base flood elevation, even in areas not delineated as a special flood hazard area on a FIRM, the area shall be considered as special flood hazard area and subject to the requirements of these regulations; or
 - (ii) Are above the base flood elevation and the area is labelled as a SFHA on the FIRM, the area shall be regulated as special flood hazard area unless the applicant obtains a Letter of Map Change that removes the area from the SFHA.
- (B) In FEMA-identified special flood hazard areas where base flood elevation and floodway data have not been identified and in areas where FEMA has not identified SFHAs, any other flood hazard data available from a federal, state, or other source shall be reviewed and reasonably used.
- (C) Base flood elevations and designated floodway boundaries on FIRMs and in FISs shall take precedence over base flood elevations and floodway boundaries by any other sources if such sources show reduced floodway widths and/or lower base flood elevations.
- (D) Other sources of data shall be reasonably used if such sources show increased base flood elevations and/or larger floodway areas than are shown on FIRMs and in FISs.
- (E) If a preliminary flood insurance rate map and/or a preliminary flood insurance study has been provided by FEMA:
 - (i) Upon the issuance of a Letter of Final Determination by FEMA, the preliminary flood hazard data shall be used and shall replace the flood hazard data previously provided from FEMA for the purposes of administering these regulations.
 - (ii) Prior to the issuance of a Letter of Final Determination by FEMA, the use of preliminary flood hazard data shall be deemed the best available data pursuant to Section (d)(2)(C)(i) and used where no base flood elevations and/or floodway areas are provided on the effective FIRM.
 - (iii) Prior to issuance of a Letter of Final Determination by FEMA, the use of preliminary flood hazard data is permitted where the preliminary base flood elevations or floodway areas exceed the base flood elevations and/or designated floodway widths

in existing flood hazard data provided by FEMA. Such preliminary data may be subject to change and/or appeal to FEMA.

- (4) *Jurisdictional boundary changes.* The floodplain ordinance in effect in any adjoining locality on the date of annexation of any area previously within the adjoining locality shall remain in effect and shall be enforced by the City for all annexed areas until the City adopts and enforces a section which meets the requirements for participation in the National Flood Insurance Program.

The City will notify FEMA when the corporate boundaries of the City have been modified and provide a map that clearly delineates the new corporate boundaries of the new area for which the authority to regulate pursuant to these regulations has either been assumed or relinquished through annexation. If the FIRM for any annexed area includes special flood hazard areas which have flood zones that have regulatory requirements not set forth in these regulations, the City shall adopt amendments to these regulations to amend the FIRM and appropriate requirements. 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.

- (5) *District boundary changes.* The delineation of any of the Floodplain Districts may be revised by the City where natural or man-made changes have occurred and/or where more detailed studies have been conducted or undertaken by the U. S. Army Corps of Engineers or other qualified agency, or an individual documents the need for such change. However, prior to any such change, approval must be obtained from FEMA. A completed LOMR is a record of this approval.
- (6) *Interpretation of district boundaries.* Initial interpretations of the boundaries of the Floodplain Districts shall be made by the Zoning Administrator. Should a dispute arise concerning the boundaries of any of the Districts, the Board of Zoning Appeals shall make the necessary determination. The person questioning or contesting the location of the District boundary shall be given a reasonable opportunity to present his case to the Board and to submit his own technical evidence if he so desires.
- (7) *Submitting model backed technical data.* A City's base flood elevations may increase or decrease resulting from physical changes affecting flooding conditions. As soon as practicable, but not later than six months after the date such information becomes available, a community shall notify the FEMA of the changes by submitting technical or scientific data. The community may submit data via a LOMR. 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.

(8) *Letters of map revision.* When development in the floodplain will cause or causes a change in the base flood elevation, the applicant, including state agencies, must notify FEMA by applying for a conditional letter of map revision (CLOMR) and then receiving a LOMR.

(d) *Establishment of Floodplain Overlay District and flood zones.*

(1) *Description of special flood hazard districts (SFHA).* The various special flood hazard districts shall include the SFHAs. The basis for the delineation of these districts shall be the FIS and the FIRM for the City prepared by FEMA, Federal Insurance Administration, dated September 28, 2007, and any subsequent revisions or amendments thereto.

The boundaries of the SFHA Districts are established as shown on the FIRM which is declared to be a part of this section and which shall be kept on file in the Department of Planning, Building, and Development.

All development within the Floodplain Overlay District is subject to the development provisions found in subsection (e) of this section.

(2) *Additional requirements in specific special flood hazard areas.*

(A) *Floodway.* The floodway is the portion of an AE Zone that is delineated, for purposes of this section, using the criterion that certain areas within the floodplain must be capable of carrying the waters of the one (1) percent annual chance flood without increasing the water surface elevation of that flood more than one (1) foot at any point. The areas included in this District are specifically defined in Table 5 of the above-referenced FIS and shown on the accompanying FIRM.

The following provisions shall apply within the floodway of an AE zone:

(i) Within any floodway area, no encroachments, including fill, new construction, substantial improvements, or other development shall be permitted unless it has been demonstrated through hydrologic and hydraulic analysis performed in accordance with standard engineering practice that the proposed encroachment will not result in any increase in flood levels within the community during the occurrence of the base flood discharge. Hydrologic and hydraulic analyses shall be undertaken only by professional engineers or others of demonstrated qualifications, who shall certify that the technical methods used correctly reflect currently-accepted technical concepts. Studies, analyses, computations, etc., shall be submitted in sufficient detail to allow a thorough review by the Zoning Administrator.

Development activities which increase the water surface elevation of the base flood may be allowed, provided that the applicant first applies for a (CLOMR), and receives the approval of FEMA. Such application shall be accompanied by a resolution adopted by the City Council for the City, endorsing such application.

If the above items in this part are satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of part d of this section.

- (ii) Permitted uses in floodway. The following uses shall be permitted as of right in the floodway to the extent that they are otherwise permitted in the underlying base zoning district and are not prohibited by any other section, and provided they do not employ structures, fill, or storage of materials and equipment within the floodway which may cause any increase in 100-year flood height and velocity:
 - (1) Agricultural operations, such as farming, pasture, grazing, outdoor plant nurseries, horticulture, forestry, sod farming, and wild crop harvesting;
 - (2) Public and private recreational uses such as parks, picnic grounds, golf courses, boat launching or swimming areas, hiking or horseback riding trails, wildlife and nature preserves, fishing areas, and trap and skeet game ranges;
 - (3) Botanical gardens; and
 - (4) Accessory residential uses such as yard areas, gardens, and play areas.
- (iii) Special exception uses in floodway. The following uses shall be permitted in the floodway by special exception granted by the Board of Zoning Appeals provided such uses are permitted in the underlying base zoning district:
 - (1) Accessory structures related to the uses set forth in subsections (ii)(1) through (ii)(4), above.
 - (2) Utilities distribution: gas/electric compressor station or substation, or water pump/lift station.
 - (3) Sewage treatment facility or water treatment facility.
 - (4) Quarry and mining operations, including excavation of sand, gravel, or clay, provided no increase in the level of flooding or velocity is caused.
 - (5) Storage of materials and equipment provided that they are not buoyant, flammable, toxic, hazardous, or explosive, and are not subject to major damage by flooding, or provided that such material and equipment is firmly anchored to prevent flotation or movement, or can be readily removed from the area within the time available after flood warning.
 - (6) Placement or storage of a recreational vehicle, provided such recreational vehicle is on the site for fewer than one hundred eighty (180) consecutive days, is fully licensed and ready for highway use. For purposes of this section, 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 if it has no permanently attached additions.

- (7) After public notice and subject to appropriate conditions and safeguards, the Board of Zoning Appeals may, as a special exception, permit the change of a nonconforming use in the floodway to another use not permitted in the floodway, provided the proposed use is permitted in the base zoning district, and the proposed use as proposed to be conducted, shall be of a nature more in keeping with the character of the floodplain overlay district than the use from which the change is proposed to be made. Failure to conduct the use in the manner approved by the Board shall be grounds for revocation of the special exception, pursuant to the procedures set forth in Section 36.2-560(e). Where such a special exception has been revoked, the nonconforming status of the use, individually or in combination, shall no longer exist, and future use of the structure or premises, individually or in combination, shall thereafter conform to the regulations of the floodplain overlay district.

- (B) AE zones with no floodway delineated. AE zones on the FIRM are those areas for which one (1) percent annual chance flood elevations have been provided and the floodway has not been delineated.

The following provisions shall apply within an AE Zone where FEMA has provided base flood elevations but has not delineated a floodway:

- (i) Until a regulatory floodway is designated, no new construction, substantial improvements, or other development (including fill) shall be permitted within the areas of special flood hazard, designated as Zones A1-30, AE, or AH on the FIRM, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one (1) foot at any point within the City.
 - (ii) Development activities in Zones A1-30, AE, or AH on the City's FIRM which increase the water surface elevation of the base flood by more than one (1) foot may be allowed, provided that the applicant first applies for a CLOMR, and receives the approval of FEMA. Such application shall be accompanied by a resolution adopted by the City Council for the City, endorsing such application.
- (C) A Zones: A Zones are those areas for which no detailed flood profiles or elevations are provided, but the one (1) percent annual chance floodplain boundary has been approximated. For these areas, the following provisions shall apply:
 - (i)

The Approximated Floodplain District shall be that floodplain area for which no detailed flood profiles or elevations are provided, but where a one (1) percent annual chance floodplain boundary has been approximated. Such areas are shown as Zone A on the maps accompanying the FIS. For these areas, the base flood elevations and floodway information from federal, state, and other acceptable sources shall be used, when available. Where the specific one (1) percent annual chance flood elevation cannot be determined for this area using other sources of data, such as the U. S. Army Corps of Engineers Floodplain Information Reports, U. S. Geological Survey Flood-Prone Quadrangles, etc., then the applicant for the proposed use, development and/or activity shall determine this base flood elevation. For development proposed in the approximate floodplain the applicant must use technical methods that correctly reflect currently accepted practices, such as point on boundary, high water marks, or detailed methodologies hydrologic and hydraulic analyses. Studies, analyses, computations, etc., shall be submitted in sufficient detail to allow a thorough review by the Zoning Administrator.

The Zoning Administrator reserves the right to require a hydrologic and hydraulic analysis for any development. When such base flood elevation data is utilized, the lowest floor shall be elevated to or above the base flood level plus twenty four (24) inches, or flood proofed to such level when applicable.

During the permitting process, the Zoning Administrator shall obtain:

- (1) The elevation of the lowest floor (in relation to mean sea level), including the basement, of all new and substantially improved structures; and,
- (2) If the structure has been flood-proofed in accordance with the requirements of this article, the elevation (in relation to mean sea level) to which the structure has been flood-proofed.

(D) AO Zones. AO Zones are those areas of shallow flooding identified as AO on the FIRM. For these areas, the following provisions shall apply:

- (i) All new construction and substantial improvements of residential structures shall have the lowest floor, including basement, elevated to two(2) feet above the flood depth specified on the FIRM. Such elevation shall be established by identifying the highest adjacent grade and adding the flood depth number specified in feet on the FIRM. If no flood depth number is specified, the lowest floor, including basement, shall be elevated no less than four (4) feet above the highest adjacent grade.
- (ii) All new construction and substantial improvements of non-residential structures shall:
 - (1)

Have the lowest floor, including basement, elevated to two (2) feet above the flood depth specified on the FIRM. Such elevation shall be the highest adjacent grade and adding the flood depth number specified in feet on the FIRM. If no flood depth number is specified, the lowest floor, including basement, shall be elevated at least four (4) feet above the highest adjacent grade; or,

- (2) Together with attendant utility and sanitary facilities, be completely flood-proofed to the specified flood level described above 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.

- (iii) Adequate drainage paths around structures on slopes shall be provided to guide floodwaters around and away from proposed structures.

- (2) *Overlay Concept.* The Floodplain Districts described above shall be overlays to the existing underlying districts as shown on the Official Zoning Ordinance Map, and as such, the provisions for the Floodplain Districts shall serve as a supplement to the underlying district provisions. If there is any conflict between the provisions or requirements of the Floodplain Districts and those of any underlying district, the more restrictive provisions shall apply. In the event any provision concerning a Floodplain District is declared inapplicable as a result of any legislative or administrative actions or judicial decision, all remaining provisions shall remain applicable and in effect.

(e) *District Provisions.*

- (1) Permit and Application Requirements.

- (A) Permit Requirement. All uses, activities, and development occurring within any floodplain district, including placement of manufactured homes, shall be undertaken only upon the issuance of a zoning permit. Such development shall be undertaken only in strict compliance with the provisions of this section and with all other applicable codes and ordinances or sections, as amended, such as the Virginia Uniform Statewide Building Code and the City's subdivision regulations set forth in Chapter 31.1, Subdivisions, of the City Code. Prior to the issuance of any such permit, the Zoning Administrator shall require all applications to include compliance with all applicable state and federal laws and shall review all sites to ensure that they are reasonably safe from flooding. Under no circumstances shall any use, activity, and/or development adversely affect the capacity of the channels or floodways of any watercourse, drainage ditch, or any other drainage facility or system.

- (B) Site Plans and Permit Applications. All applications for development within any floodplain district and all building permits issued for the floodplain shall incorporate the following information:

- (i) The elevation of the Base Flood at the site.
 - (ii) The elevation of the lowest floor (including basement) or, in V zones, the lowest horizontal structural member.
 - (iii) For structures to be flood-proofed (non-residential only), the elevation to which the structure will be flood-proofed.
 - (iv) Topographic information showing existing and proposed ground elevations.
- (C) Elevation certificates and floodproofing certificates.
 - (i) All applications for zoning permits for structures shall include a standard FEMA elevation certificate completed by a licensed surveyor or engineer.
 - (ii) All applications for nonresidential structures to be floodproofed shall include a FEMA floodproofing certificate, when applicable.
 - (iii) Prior to issuance of a Certificate of Occupancy, the applicant shall provide a final FEMA elevation certificate of the as-built construction.
- (2) *General Standards.* The following provisions shall apply to all permits:
 - (A) New construction and substantial improvements shall be built according to this section and the Virginia Uniform Statewide Building Code, and anchored to prevent flotation, collapse or lateral movement of the structure.
 - (B) 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 anchoring requirements for resisting wind forces.
 - (C) New construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.
 - (D) New construction or substantial improvements shall be constructed by methods and practices that minimize flood damage.
 - (E) New electrical, heating, ventilation, plumbing, air conditioning equipment and other service facilities, including duct work, shall be designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.
 - (F) New and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system.
 - (G) 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.
 - (H)

On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding.

- (I) In addition to provisions A - H above, in all special flood hazard areas, the additional provisions shall apply:
 - (J) Prior to any proposed alteration or relocation of any channels or of any watercourse, stream, etc., within this jurisdiction a permit shall be obtained from the U. S. Corps of Engineers, the Virginia Department of Environmental Quality, and the Virginia Marine Resources Commission (a joint permit application is available from any of these organizations). Furthermore, in riparian areas, notification of the proposal shall be given by the applicant to all affected adjacent jurisdictions, the Department of Conservation and Recreation (Division of Dam Safety and Floodplain Management), other required agencies, and FEMA.
 - (K) The flood carrying capacity within an altered or relocated portion of any watercourse shall be maintained.
- (3) *Elevation and Construction Standards.* In all identified flood hazard areas where base flood elevations have been provided in the FIS or generated by a certified professional in accordance with subsection (d)(2)C of this section, the following provisions shall apply:
- (A) Residential Construction. New construction or substantial improvement of any residential structure in Zones A1-30, AE, AH and A with detailed base flood elevations shall have the lowest floor, including basement, elevated to or above the base flood level plus twenty-four (24) inches of freeboard. In addition, all electrical, heating, ventilation, plumbing, air conditioning equipment, and other service facilities, including ductwork, for new construction or substantial improvement shall be elevated or floodproofed to two (2) feet above the base flood elevation, also known as two (2) feet of freeboard.
 - (B) Non-Residential Construction.
 - (i) New construction or substantial improvement of any commercial, industrial, or non-residential building shall have the lowest floor, including basement, elevated to or above the base flood level plus twenty-four (24) inches of freeboard. In addition, all electrical, heating, ventilation, plumbing, air conditioning equipment, and other service facilities, including ductwork, for new construction or substantial improvement shall be elevated or floodproofed to two (2) feet above the base flood elevation, also known as two (2) feet of freeboard.
 - (ii) Non-residential buildings located in all A1-30, AE, and AH zones 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 twenty-four (24) inches of freeboard 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. Certain buildings and structures including detached garages, small pole barns, storage sheds, gazebos, picnic shelters, and similar structures may be wet flood proofed. For any development requiring a building permit, 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 floodproofed, shall be maintained by the Zoning Administrator.

(C) Space Below the Lowest Floor. In zones A, AE, AH, AO, and A1-A30, fully enclosed areas, of new construction or substantially improved structures, which are below the regulatory flood protection elevation shall:

- (i) not be designed or used for human habitation, but shall be used solely 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).
- (ii) be constructed entirely of flood resistant materials below the regulatory flood protection elevation;
- (iii) 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:
 - (1) Provide a minimum of two (2) openings on different sides of each enclosed area subject to flooding.
 - (2) 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.
 - (3) If a building has more than one (1) enclosed area, each area must have openings to allow floodwaters to automatically enter and exit.
 - (4) The bottom of all required openings shall be no higher than one (1) foot above the adjacent grade.
 - (5) Openings may be equipped with screens, louvers, or other opening coverings or devices, provided they permit the automatic flow of floodwaters in both directions.
 - (6)

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.

(D) Standards for Manufactured Homes and Recreational Vehicles

- (i) In all designated special flood hazard areas, all manufactured homes placed, or substantially improved, on individual lots or parcels, must meet all the requirements for the zone in which they are located for new construction, including the elevation and anchoring requirements in this section.
- (ii) All recreational vehicles placed on sites must either
 - (1) be on the site for fewer than 180 consecutive days, 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
 - (2) meet all the requirements for manufactured homes in subsection (e)(3)(D)(i)

(f) *Existing Structures in Floodplain Areas.* Any structure or use of a structure or premises must be brought into conformity with these provisions when it is changed, repaired, or improved, unless one (1) of the following exceptions is established before the change is made:

(1) The Zoning Administrator has determined that:

- (A) A proposed change is not a substantial repair or substantial improvement,
- (B) No new square footage is being built in the floodplain that is not compliant,
- (C) No new square footage is being built in the floodway, and
- (D) No new square footage is being created or existing square footage converted for use as habitable space below the elevation of the base flood elevation plus two (2) feet of freeboard, and
- (E) The change complies with this section and the Virginia Uniform Statewide Building Code.

(2) The changes are required to comply with a citation for a health or safety violation.

(3) The structure is a historic structure and the change required would impair the historic nature of the structure. The historic structure shall be flood proofed to the extent practical in accordance with the Virginia Uniform Statewide Building Code and FEMA Floodplain Management Bulletin Historic Structures, FEMA P-467-2, as the same may be amended or updated from time to time.

(g) *Variances.* Variances shall be issued only upon (i) a showing of good and sufficient cause, (ii) after the Board of Zoning Appeals has determined that failure to grant the variance would result in exceptional hardship to the applicant, and (iii) after the Board of Zoning Appeals has determined

that the granting of such variance will not result in unacceptable or prohibited increases in flood heights, additional threats to public safety, extraordinary public expense; and will not create nuisances, cause fraud or victimization of the public, or conflict with local laws or ordinances.

In passing upon applications for variances, the Board of Zoning Appeals shall satisfy all relevant factors and procedures specified in other sections of the zoning ordinance and consider the following additional factors:

- (1) The danger to life and property due to increased flood heights or velocities caused by encroachments. No variance shall be granted for any proposed use, development, or activity within any floodway district that will cause any increase in the one (1) percent chance flood elevation.
- (2) The danger that materials may be swept on to other lands or downstream to the injury of others.
- (3) The proposed water supply and sanitation systems and the ability of these systems to prevent disease, contamination, and unsanitary conditions.
- (4) The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owners.
- (5) The importance of the services provided by the proposed facility to the community.
- (6) The requirements of the facility for a waterfront location.
- (7) The availability of alternative locations not subject to flooding for the proposed use.
- (8) The compatibility of the proposed use with existing development and development anticipated in the foreseeable future.
- (9) The relationship of the proposed use to the comprehensive plan and floodplain management program for the area.
- (10) The safety of access by ordinary and emergency vehicles to the property in time of flood.
- (11) The expected heights, velocity, duration, rate of rise, and sediment transport of the flood waters expected at the site.
- (12) The historic nature of a structure. Variances for repair or rehabilitation of historic structures may be granted upon a determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as a historic structure and the variance is the minimum necessary to preserve the historic character and design of the structure.
- (13) Such other factors which are relevant to the purposes of this section.

The Board of Zoning Appeals may refer any application and accompanying documentation pertaining to any request for a variance to any engineer or other qualified person or agency for technical assistance in evaluating the proposed project in relation to flood heights and velocities, and the adequacy of the plans for flood protection and other related matters.

Variances shall be issued only after the Board of Zoning Appeals has determined that the granting of such will not result in unacceptable or prohibited increases in flood heights, additional threats to public safety, extraordinary public expense; and will not create nuisances, cause fraud or victimization of the public, or conflict with local laws or ordinances.

Variances shall be issued only after the Board of Zoning Appeals has determined that the variance will be the minimum required to provide relief.

The Board of Zoning Appeals shall notify the applicant for a variance, in writing, that the issuance of a variance to construct a structure below the one (1) percent chance flood elevation (a) increases the risks to life and property and (b) will result in increased premium rates for flood insurance.

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.

(Ord. No. 37633, § 5, 11-20-06; Ord. No. 37915, § 1, 10-1-07; Ord. 39918, § 1, 4-21-14; Ord. No. 40710, § 1, 12-5-16; Ord. No. 40748, § 1, 1-17-17; Ord. No. 41173, § 1, 6-18-18; Ord. No. 42205, § 1, 11-15-21)