

Chapter 204

Special Flood Hazard Areas

ARTICLE I GENERAL PROVISION

§ 204.1 Statement of Purpose

The purpose of this ordinance is to ensure public safety; minimize hazards to persons and property from flooding, to protect watercourses from encroachment, and to maintain the capability of floodplains to retain and carry off floodwaters. The Town of Smithfield, RI elects to comply with the requirements of the National Flood Insurance Act of 1968 (P.L. 90-488, as amended).

§ 204.2 Applicability

A. Special Flood Hazard Areas

The Special Flood Hazard Areas are herein established as a floodplain overlay district. The District includes all special flood hazard areas within the Town of Smithfield, RI, designated as Zone A, AE, AH, AO or A99 on Providence County Flood Insurance Rate Map (FIRM) and Digital FIRM issued by the Federal Emergency Management Agency (FEMA) for the administration of the National Flood Insurance Program. The map panels of the Providence County FIRM that are wholly or partially within the Town of Smithfield are panel numbers 44007C0160G, 44007C0164G, 44007C0165G, 44007C0178G, 44007C0186G, 44007C0277G, 44007C0281G and 44007C0282G dated 03/02/2009; panel number 44777CINDOC, dated 09/18/2013; panel numbers 44007C0166H, 44007C0167H, 44007C0168H, 44007C0169H, 44007C0188H, 44007C0189H, 44007C0301H and 44007C0302H, dated 10/02/2015. The exact boundaries of the District may be defined by the 100-year base flood elevations shown on the FIRM and further defined by the Providence County Flood Insurance Study (FIS) report 44007CC001C, dated 10/02/2015. The office of the Town Engineer is responsible for floodplain management. The FIRM and FIS report and any revisions thereto are incorporated herein by reference and are on file with the Town Engineer.

B. Administrative Provisions

Building Permit. All proposed construction or other development within a Special Flood Hazard Area shall require a permit.

The National Flood Insurance Program Special Flood Hazard Area requires permits for all projects that meet the definition of development, not just “building” projects. Development projects include any filling, grading, excavation, mining, drilling, storage of materials, temporary stream crossings. If the construction or other development within

a Special Flood Hazard Area is not covered by a building permit, all other non-structural activities shall be permitted by either the Rhode Island Coastal Resources Management Council and/or the Rhode Island Department of Environmental Management as applicable. Therefore if another State agency issues a permit, the local building official must have the opportunity for input and keep a copy of the respective permit in their files.

Prior to the issuance of a building or development permit, the applicant shall submit evidence that all necessary permits and approvals have been received from all government agencies from which approval is required by federal or state law. A permit fee (based on the cost of the construction) may be required to be paid to the The Town of Smithfield and a copy of a receipt for the same shall accompany the application. An additional fee may be charged if the code enforcement officer and/or board of appeals needs the assistance of a professional engineer.

Disclaimer of Liability. The degree of flood protection required by the ordinance is considered reasonable but does not imply total flood protection.

Severability. If any section, provision, or portion of this ordinance is adjudged unconstitutional or invalid by a court, the remainder of the ordinance shall not be affected.

Abrogation and Greater Restriction. This ordinance shall not in any way impair/remove the necessity of compliance with any other applicable laws, ordinances, regulations, etc. Where this ordinance imposes a greater restriction, the provisions of this ordinance shall control.

Enforcement. The building official shall enforce all provisions as applicable in reference to RIGL § 23-27.3-108.1.

Penalties. Every person who shall violate any provision of this code shall be subject to penalties put forth in RIGL § 23-27.3-122.3.

§ 204.3 Notification of Water Course Alteration

In a riverine situation, the Town Engineer shall notify the following of any alteration or relocation of a watercourse:

- Adjacent Communities
- Bordering States (optional)
- NFIP State Coordinator
Rhode Island Emergency Management Agency
645 New London Avenue
Cranston, RI 02920

- Risk Analysis Branch
Federal Emergency Management Agency, Region I
99 High Street, 6th Floor
Boston, MA 02110

The carrying capacity of the altered or relocated watercourse shall be maintained.

§ 204.4 Use Regulations

A. Reference to Existing Regulations (b, c, d, e communities)

The Special Flood Hazard Areas are established as a floodplain overlay district. All development in the district, including structural and non-structural activities, whether permitted by right or by special permit must be in compliance with the following:

- Rhode Island State Building Code (As established under Rhode Island General Law § 23-27.3);
- Coastal Resources Management Act, Rhode Island Coastal Resources Management Council (RIGL § 46-23)
- Endangered Species Act, Rhode Island Department of Environmental Management (RIGL § 20-1-2)
- Freshwater Wetlands Act, Rhode Island Department of Environmental Management (RIGL § 2-1-18)
- Minimum Standards Related to Individual Sewage Disposal Systems, Rhode Island Department of Environmental Management (RIGL §, 5-56, 5-56.1, 23-19.15, 23-19.5, 23-24.3, 42-17.1, and 46-13.2)
- Water Quality Regulations, Rhode Island Department of Environmental Management (RIGL § 42-17.1 and 42-17.6 and 46-12)

Any variances from the provisions and requirements of the above referenced state regulations may only be granted in accordance with the required variance procedures of these state regulations.

B. Other Use Regulations

- 1) Within Zones AH and AO on the FIRM, adequate drainage paths must be provided around structures on slopes, to guide floodwaters around and away from proposed structures.
- 2) Within Zones AO on the FIRM, new and substantially improved residential structures shall have the top of the lowest floor at least as high as the FIRM's depth number above the highest adjacent grade and non-residential structures shall be elevated or flood-proofed above the highest adjacent grade to at least as high as the depth number on the FIRM. On FIRMs without a depth

number for the AO Zone, structures shall be elevated or floodproofed to at least two feet above the highest adjacent grade.

- 3) In Zones A1-30 and AE, along watercourses that have a regulatory floodway designated on the Town of Smithfield, County of Providence, FIRM encroachments are prohibited in the regulatory floodway which would result in any increase in flood levels within the community during the occurrence of the base flood discharge.
- 4) All subdivision proposals must be designed to assure that:
 - a.) such proposals minimize flood damage;
 - b.) all public utilities and facilities are located and constructed to minimize or eliminate flood damage; and
 - c.) adequate drainage is provided to reduce exposure to flood hazards.
- 5) Detached accessory structures in Zones A, AE, A1-30, AO, and AH (i.e., garages, sheds) do not have to meet the elevation or dry flood-proofing requirement if the following standards are met:
 - a.) The structure has a value less than \$1,000.
 - b.) The structure has unfinished interiors and must not be used for human habitation. An apartment, office or other finished space over a detached garage is considered human habitation and would require the structure to be elevated.
 - c.) The structure is not in the floodway.
 - d.) The structure is not used for storage of hazardous materials.
 - e.) The structure is used solely for parking of vehicles and/or limited storage.
 - f.) The accessory must be wet floodproofed and designed to allow for the automatic entry and exit of flood water.
 - g.) The accessory structure shall be firmly anchored to prevent flotation, collapse and lateral movement.
 - h.) Service facilities such as electrical, mechanical and heating equipment must be elevated or floodproofed to or above the base flood elevation.
 - i.) The structure must not increase the flood levels in the floodway.
- 6) Existing contour intervals of site and elevations of existing structures must be included on plan proposal.
- 7) No person shall change from business/commercial to residential use of any structure or property located in the floodway of a Special Flood Hazard Area so as to result in a use or expansion that could increase the risk to the occupants.
- 8) The space below the lowest floor:
 - a.) Free of obstructions as described in FEMA Technical Bulletin 5 “Free of Obstruction Requirements for Buildings Located in Coastal High Hazard Area in Accordance with the National Flood Insurance Program”, or

- b.) Constructed with open wood lattice-work, or insect screening intended to collapse under wind and water without causing collapse, displacement, or other structural damage to the elevated portion of the building or supporting piles or columns; or,
- c.) Designed with an enclosed area less than 300 square feet that is constructed with non-supporting breakaway walls that have a design safe loading resistance of not less than 10 or more than 20 pounds per square foot.

C. Base Flood Elevation and Floodway Data

- 1) **Floodway Data.** In Zones A, A1-30, and AE, along watercourses that have not had a regulatory floodway designated, the best available Federal, State, local, or other floodway data shall be used to prohibit encroachments in floodways which would result in any increase in flood levels within the community during the occurrence of the base flood discharge.
- 2) **Base Flood Elevation Data.** Base flood elevation data is required for subdivision proposals or other developments greater than fifty (50) lots or 5 acres, whichever is the lesser, within unnumbered A zones.
- 3) **Base Flood Elevations in A Zones.** In the absence of FEMA BFE data and floodway data, the best available Federal, State, local, or other BFE or floodway data shall be used as the basis for elevating residential and non-residential structures to or above the base flood level and for floodproofing non-residential structures to or above the base flood level.

§ 204.5 Definitions

Unless specifically defined below, words and phrases used in this ordinance pertain to floodplain management, have the same meaning as they have in common usage and to give this ordinance it's most reasonable application.

Accessory Structure – A structure which is on the same parcel of property as the principal structure to be insured and the use of which is incidental to the use of the principal structure.

Area of Shallow Flooding (*for a community with AO or AH Zones only*) - A designated AO, AH, AR/AO, AR/AH, or VO zone on a community's Flood Insurance Rate Map (FIRM) with a one percent or greater annual chance of flooding to an average depth of one to three feet where a clearly defined channel does not exist, where the path of flooding is unpredictable, and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow.

Area of Special Flood Hazard – see definition for “Special Flood Hazard Area”.

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

Base Flood Elevation (BFE) – The elevation of the crest of the base flood or 100-year flood. The height, as established in relation to the North American Vertical Datum (NAVD) of 1988 (or other datum where specified), in relation to mean sea level expected to be reached by the waters of the base flood at pertinent points in the floodplains of coastal and riverine areas.

Basement – Any area of a building having its floor subgrade (below ground level) on all sides.

Building – see definition for “Structure”.

Coastal A Zone – Area within a special flood hazard area, landward of a V Zone or landward of an open coast without mapped V Zones. The principal source of flooding must be astronomical tides, storm surges, seiches, or tsunamis, not riverine flooding. During the base flood conditions, the potential for breaking wave heights shall be greater than or equal to 1.5 feet.

Cost – As related to substantial improvements, the cost of any reconstruction, rehabilitation, addition, alteration, repair or other improvement of a structure shall be established by a detailed written contractor’s estimate. The estimate shall *include*, but not be limited to: the cost of materials (interior finishing elements, structural elements, utility and service equipment); sales tax on materials, building equipment and fixtures, including heating and air conditioning and utility meters; labor; built-in appliances; demolition and site preparation; repairs made to damaged parts of the building worked on at the same time; contractor’s overhead; contractor’s profit; and grand total. Items to be *excluded* include: cost of plans and specifications, survey costs, permit fees, costs to correct code violations subsequent to a violation notice, outside improvements such as septic systems, water supply wells, landscaping, sidewalks, fences, yard lights, irrigation systems, and detached structures such as garages, sheds, and gazebos.

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

Existing Manufactured Home Park or Manufactured Home Subdivision – A manufactured home park or manufactured home subdivision for which the construction of facilities for servicing the lots on which the manufactured home are to be affixed (including, as a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed before the effective date of the floodplain management regulations adopted by a community.

Expansion to an Existing Manufactured Home Park or Existing Manufactured Home Subdivision – The preparation of additional sites by the construction of facilities for servicing the lots on which the manufacturing homes are to be affixed (including the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads).

Federal Emergency Management Agency (FEMA) - The federal agency that administers the National Flood Insurance Program (NFIP).

Flood or Flooding – A general and temporary condition of partial or complete inundation of normally dry land areas from either the overflow of inland or tidal waters, or the unusual and rapid accumulation or runoff of surface waters from any source.

Flood Insurance Rate Map (FIRM) – The official map of a community on which the Federal Insurance Administrator 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) – The official study of a community in which the Federal Emergency Management Agency (FEMA) has conducted a technical engineering evaluation and determination of local flood hazards, flood profiles and water surface elevations. The Flood Insurance Rate Maps (FIRM), which accompany the FIS, provide both flood insurance rate zones and base flood elevations, and may provide the regulatory floodway limits.

Flood Proofing – 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 a designated height. For the purposes of these regulations, the term “Regulatory Floodway” is synonymous in meaning with the term “Floodway”.

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 of the watershed.

Functionally Dependent Use or Facility – A use that cannot perform its intended purpose unless it is located or carried out in close proximity to water. The term includes only docking facilities, port facilities that are necessary for the loading and unloading of cargo or passengers, and ship building and ship repair facilities.

Highest Adjacent Grade (HAG) – 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: (a) Listed individually in the National Register of Historic Places (a listing maintained by the Department of the Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register; (b) Certified or preliminarily determined by the Secretary of the Interior as contributing to the historic significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district; (c) Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of the Interior; or (d) Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either: (1) By an approved state program as determined by the Secretary of the Interior or (2) Directly by the Secretary of the Interior in states without approved programs.

Limit of Moderate Wave Action (LiMWA) - An advisory line indicating the limit of the 1.5-foot wave height during the base flood.

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 § 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 attached to the required utilities. The term “manufactured home” does not include a “recreational vehicle”.

Manufactured Home Park or Manufactured Home Subdivision – A parcel or contiguous parcels of land divided into two (2) or more manufactured home lots for rent or sale.

Market Value – Market value is the price of a structure that a willing buyer and seller agree upon. This can be determined by an independent appraisal by a professional appraiser; the property's tax assessment, minus land value; the replacement cost minus depreciation of the structure; the structure's Actual Cash Value.

New Construction – Structures for which the “start of construction” commenced on or after the effective date of an initial FIRM or after December 31, 1974, whichever is later, 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.

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

Recreational Vehicle – A vehicle which is: (a) built on a single chassis; (b) four hundred (400) square feet or less when measured at the largest horizontal projection; (c) designed to be self-propelled or permanently towable by a light duty truck; and (d) designed primarily not for use as a permanent dwelling but as a temporary living quarters for recreational, camping, travel, or seasonal use.

Regulatory Floodway – see definition for “Floodway”.

Sheet Flow Area (*for community with AO, AH, or VO Zones only*) – see definition for “Area of Shallow Flooding”.

Special Flood Hazard Area (SFHA) – The land in the floodplain within a community subject to a one (1) percent or greater chance of flooding in any given year. After detailed ratemaking has been completed in preparation for publication of the flood insurance rate map, Zone A usually is refined into Zones A, AO, AH, A1-30, AE, A99, AR, AR/A1-30, AR/AE, AR/AO, AR/AH, AR/A, VO, or V1-30, VE or V. For purposes of these regulations, the term “special flood hazard area” is synonymous in meaning with the phrase “area of special flood hazard”.

Start of Construction – For other than new construction or substantial improvements under the Coastal Barrier Resources Act (P.L. 97-348), includes substantial improvement and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition placement, substantial improvement or other improvement was within one hundred and 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 erections 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 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.

For insurance purposes, means:

1. A building with two or more outside rigid walls and a fully secured roof, that is affixed to a permanent site;
2. A manufactured home (“a manufactured home,” also know as a mobile home, is a structure; built on permanent chassis, transported to its site in one or more sections, and affixed to a permanent foundation); or
3. A travel trailer without wheels, built on a chassis and affixed to a permanent foundation, that is regulated under the community’s floodplain management and building ordinances or laws.

For the latter purpose, “structure” does not mean recreational vehicle or a park trailer or other similar vehicle, except as described in paragraph (3) of this definition, or a gas or liquid storage tank.

Substantial Damage – Damage of any origin sustained by a structure, whereby the cost of restoring the structure to before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.

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

1. Any project 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 the “historic structure”, provided that the alteration will not preclude the structure’s continued designation as a “historic structure”.

Variance - A grant of relief by a community from the terms of the floodplain management ordinance that allows construction in a manner otherwise prohibited and where specific enforcement would result in unnecessary hardship.

Violation – Failure of a structure or other development to be fully compliant with the community’s floodplain management ordinance. Construction or other development without required permits, lowest floor elevation documentation, flood-proofing certificates or required floodway encroachment calculations is presumed to be in violation until such time as that documentation is provided.

Article II Regulations

§ 204-6 Permit required.

- A.** Except where construction is covered by a building permit or by approval from the Smithfield Planning Board of a subdivision plat or land development project, any other development shall require the issuance of a development permit by the Building Official or designee. Said permit shall be in a form authorized by the Town Council.
- B.** The application for a flood hazard development permit shall be submitted to the code enforcement officer and shall include:
1. The name and address of the applicant;
 2. An address or a map indicating the location of the construction site;
 3. A site plan showing location of existing and proposed structures, sewage disposal facilities, water supply facilities, areas to be cut and filled, and the dimensions of the lot;
 4. A statement of the intended use of the structure;
 5. A statement as to the type of sewage system proposed;
 6. Specification of dimensions of the proposed structures;
 7. The elevation (in relation to mean sea level) of the lowest floor, including basement, and if the lowest floor is below grade on one or more sides, the elevation of the floor immediately above;
 8. Base flood elevation data for all new, relocated or substantially improved structures;
 9. The elevation (in relation to mean sea level) to which the structure will be flood-proofed;
 10. The description of the extent to which any watercourse will be altered or relocated as a result of the proposed development.
- C.** Prior to the issuance of a building or development permit, the applicant shall submit evidence that all necessary permits and approvals have been received from all government agencies from which approval is required by federal or state law.

§ 204-6 Permit fee.

- A.** A permit fee (based on the cost of the construction) may be required to be paid to the Town of Smithfield and a copy of a receipt for the same shall accompany the application. An additional fee may be charged if the code enforcement officer and/or board of appeals needs the assistance of a professional engineer.

§ 204-7 Review of flood hazard development permit applications.

- A.** The Building Official, Town Engineer or designee shall:
1. Review all applications for flood hazard development permits to determine that all pertinent requirements as described in § 204-6B have been or will be met;
 2. Utilize, in the review of all flood hazard development permit applications, the base flood data contained in the "Flood Insurance Study--Town of Smithfield, Rhode Island, Providence County," as described in § 204-5.
 3. Make interpretations of the location of boundaries of special flood hazard areas shown on maps described in § 204-5;
 4. In A Zones, in absence of FEMA BFE data and floodway data, obtain, review, and reasonably utilize other BFE and floodway data as a basis for elevating residential structures to or above the base flood level, and for flood-proofing or elevating non-residential structures to or above the base flood level.
 5. In review of flood hazard development permit applications, determine that all necessary permits have been obtained from those federal, state and local government agencies from which prior approval is required;
 6. Notify adjacent municipalities, the state department of environmental management and the state bureau of civil emergency preparedness prior to any alteration or relocation of a watercourse and submit copies of such notifications to the Federal Emergency Management Agency and maintain carrying capacity of altered watercourse; and
 7. Maintain, as a permanent record, copies of all flood hazard development permits issued and data relevant thereto, including reports of the zoning board of review on variances.

§ 204-8 Development standards.

The following standards shall apply to any construction or other development located wholly or partly within an area of special flood hazard as defined in § 204-5. Please also refer to the current Rhode Island State Building Code, One and Two Family Dwelling Code, Plumbing Code, Mechanical Code, and Electrical for state standards.

A. No watercourse may be altered in a manner which will, in the opinion of the Building Official or designee, result in any decrease in the capacity of the watercourse, and no land shall be graded or altered in such a manner as to increase the base flood elevation within the Town of Smithfield. Where any alteration is permitted, the Building Official or designee will notify the adjacent communities, the Rhode Island Statewide Planning Program and the Federal Emergency Management Agency.

B. In a regulatory floodway, any encroachment is prohibited which would cause any increase in the Base Flood level unless hydrologic and hydraulic analyses prove that the proposed encroachment would not increase flood levels during the Base Flood discharge.

C. The filling or excavation of land may be permitted only under the following conditions:

1. Said action will not encroach upon a watercourse.
2. Said action will not result in an increase in the potential flood level. Where it is determined that said action may result in an increase in the potential flood level, the Building Official or designee shall require appropriate measures to offset the potential increase. Adequate drainage shall be provided so as to reduce the exposure of the site or any other land to flood hazard.

D. No outdoor storage of materials or equipment which is likely to cause damage to property, create a potential obstruction to floodwaters, create a potential fire hazard or pollute the waters during flood periods shall be permitted in any special flood hazard area. Such materials or equipment shall include but not necessarily be limited to: lumber and other buoyant materials, water-soluble materials, volatile or flammable materials, acids or poisons.

E. Provision shall be made for anchoring facilities, equipment or yard features which are capable of movement or flotation in floodwaters. Such items shall include but shall not necessarily be limited to: fences, sheds, animal shelters, tanks, storage boxes, planters, vehicles, boats and other items normally positioned or stored on a site outside of a structure.

F. The use of flood-resistant materials shall be used for structures within an area of special flood hazard as defined in § 204-5.

G. Construction methods and practices shall be used that minimize flood damage.

H. Electrical, heating, ventilation, plumbing, air conditioning equipment, and other service facilities shall be designed and/or located to prevent water entry to accumulation.

I. Onsite waste disposal systems shall be designed to avoid impairment or contamination of the floodway.

J. New and replacement water supply and sanitary sewage systems shall be designed to minimize or eliminate infiltration

K. Base flood elevation data is required for subdivision proposals or other development greater than 50 lots or five (5) acres.

§ 204-9 Specific Standards.

A. Construction Standards in Special Flood Hazard Areas (SFHA), Zones A, A1-30, AE.

1. Residential Construction

All new construction, substantial improvements, and repair to structures that have sustained substantial damage shall have the bottom of the lowest floor, including basement, elevated to or above the base flood elevation (BFE).

2. Non-Residential Construction.

All new construction, substantial improvements, and repair to structures that have sustained substantial damage which are commercial, industrial or non-residential structures shall:

(a) Have the bottom of the lowest floor, including basement, elevated to or above the base flood elevation (BFE); or

(b) In lieu of being elevated, non-residential structures may be dry flood-proofed to one (1) foot above the BFE provided that together with all attendant utilities and sanitary facilities the areas of the structure below the required elevation are watertight with walls substantially impermeable to the passage of water, and provided that such structures are composed of structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effects of buoyancy. A Rhode Island registered professional engineer or architect shall review and/or develop structural design specifications and plans for the construction, and shall certify that the design and methods of construction are in accordance with acceptable standards of practice or meeting the provisions of this section. Such certification shall be provided to the Building Official or designee.

3. Fully Enclosed Areas Below The Base Flood Elevation Of Elevated Buildings.

All new construction, substantial improvements, or repair of substantial damage to residential or non-residential structures that include fully enclosed areas formed by a foundation and other exterior walls below the base flood elevation (BFE) of an elevated building, shall be designed to preclude finished living space and be designed to allow for the entry and exit of flood waters to automatically equalize hydrostatic flood forces on exterior walls (wet flood-proofing). Designs for complying with this requirement must either be certified by a Rhode Island registered professional engineer or architect, or meet the following minimum criteria listed in sections (a)-(g) below:

(a) Provide a minimum of two (2) openings (hydraulic flood vents) having a total net area of not less than one square inch for every one square foot of enclosed area subject to flooding. These hydraulic openings must be located on at least two different walls. Only the area (square footage) that lies below the BFE can be used in the calculation of net area of vents required;

(b) The bottom of all openings shall be no higher than one (1) foot above grade. At least one side of the structure's fully enclosed area must be at or above grade. Fill placed around the foundation walls must be graded so that the elevation inside the enclosed area is equal to or higher than the adjacent outside elevation on at least one side of the building. The foundation slab of a residential structure, including the slab of a crawlspace, must be set equal to the outside finished grade on at least one side of the building;

(c) The openings may be equipped with screens, louvers, valves or other coverings or devices provided they permit the automatic entry and exit of flood waters in both directions without any external influence or control such as human intervention, including the use of electrical and other non-automatic mechanical means. Other coverings may be designed and certified by an engineer or approved by the Building Official or designee.

(d) The area cannot be used as finished living space. Use of the enclosed area shall be the minimum necessary and shall only be used for the parking of vehicles, building access or limited storage. Access to the enclosed area shall be the minimum necessary to allow for the parking of vehicles (garage door) or limited storage of maintenance equipment used in connection with the premises (standard exterior door) or entry to the living area (stairway or elevator). The enclosed area shall not be used for human habitation or partitioned into separate rooms;

(e) All interior walls, floor, and ceiling materials located below the BFE shall be unfinished and resistant to flood damage.

(f) Electrical, plumbing, machinery or other utility equipment that service the structure (furnaces, oil or propane tanks, air conditioners, heat pumps, hot water heaters, ventilation, washers, dryers, electrical junction boxes, circuit breaker boxes and food freezers) are prohibited in the fully enclosed area below the BFE. Utilities or service equipment located in this enclosed area, even if elevated above the BFE in the space, will subject the structure to increased flood insurance rates.

(g) A residential building with a structurally attached garage having the floor slab below the BFE is considered an enclosed area below the BFE and must meet the standards of § 204-9C. A garage attached to a residential structure, constructed with the garage floor slab below the BFE, must be designed to allow for the automatic entry and exit of floodwaters in both directions. Flood openings or vents are required in the exterior walls of the garage or in the garage doors. The human intervention necessary to open garage doors when flooding occurs is not an acceptable means of meeting the openings requirements. In addition to the automatic entry of floodwaters, the areas of the garage below BFE must be constructed with flood resistant materials. Garages attached to non-residential structures must also meet the aforementioned requirements or be dry flood-proofed as per the requirements of Sections § 204-9C.

4. Manufactured (Mobile) Homes and Recreational Vehicles (RVs).

(a) In all Special Flood Hazard Areas (SFHA), any manufactured (mobile) homes to be newly placed, substantially improved or repaired as a result of substantial damage, shall be elevated so that the bottom of the lowest floor is at or above the base flood elevation (BFE). This includes SFHAs outside a manufactured home park or subdivision, in a new manufactured home park or subdivision, in an expansion to an existing manufactured home park or subdivision, or on a site in an existing park which a manufactured home has incurred substantial damage as a result of a flood.

(b) All manufactured (mobile) homes within a SFHA shall be placed on a permanent foundation which itself is securely anchored and to which the structure is securely anchored so that it will resist flotation, lateral movement and hydrostatic pressures. Anchoring may include, but not be limited to, the use of over-the-top or frame ties to ground anchors.

(c) All manufactured (mobile) homes within a SFHA shall be installed using methods and practices which minimize flood damage. Adequate access and drainage should be provided. Elevation construction standards include piling foundations placed no more than ten (10) feet apart, and reinforcement is provided for piers more than six (6) feet above ground level.

(d) Recreational vehicles placed on sites within a SFHA shall either (i) be on the site for fewer than 180 consecutive days, and (ii) be fully licensed and ready for highway use, OR (iii) be elevated and anchored. 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.

(e) Public utilities and facilities in manufactured (mobile) homes or subdivisions with a SFHA shall be constructed so as to minimize flood damage.

5. Accessory Structures

Detached accessory structures in Zones A, AE, A1-30, AO, and AH (i.e., garages, sheds) do not have to meet the elevation or dry flood-proofing requirement if the following standards are met:

- (a) The structure is no more than 500 square feet and has a value less than \$3000.
- (b) The structure has unfinished interiors and must not be used for human habitation. An apartment, office or other finished space over a detached garage is considered human habitation and would require the structure to be elevated.
- (c) The structure is used solely for parking of vehicles and/or limited storage.
- (d) The accessory structure must be wet-flood-proofed and designed to allow for the automatic entry and exit of flood water.
- (e) The accessory structure shall be firmly anchored to prevent flotation, collapse and lateral movement.
- (f) Service facilities such as electrical, mechanical and heating equipment must be elevated or flood-proofed to or above the base flood elevation.
- (g) The structure must comply with the floodway encroachment provision in Section § 204-9C.

1. Recreational Vehicles

In V1-30, VE, and V-Zones, all recreational vehicles to be placed on a site must:

- 1. Be elevated and anchored; OR
- 2. Be on the site for less than 180 consecutive days; OR
- 3. Be fully licensed and highway ready

§ 204-10 Variance.

A. The Zoning Board of Review may hear and grant a variance as prescribed in this section subject to the prerequisites contained therein. In addition to applying the criteria and requirements of this Article:

- (a) Describe in its decision the exact extent of the variance granted.
- (b) Indicate in its decision that the granting of such variance may affect the flood insurance rates as they apply to the subject property up to amounts as high as \$25 per \$100 of insurance coverage, and further, that construction or other development below the base flood elevation may increase risk to life and property.

(c) Forward a copy of its written decision and findings to the applicant, the Building Official or designee, the Rhode Island Statewide Planning Program and the Federal Insurance Administration in the annual report of the Town to the Administration.

B. No variance may be granted which will result in any increase in flood levels.

§ 204-11 Enforcement.

A. It shall be the duty of the Building Official, Town Engineer or designee to enforce the provisions of this article. If the code enforcement officer finds that any provisions of this article are being violated, he shall notify, in writing, the person responsible for such violation indicating the nature of the violation and ordering the action necessary to correct it.

B. When the above action does not result in the correction or abatement of the violation, the municipal officers, upon notice from the code enforcement officer, are hereby authorized and directed to institute any and all actions, whether legal or equitable, necessary to the enforcement of this article. Any person who continues to violate any provision of this article after receiving notice of such violation shall be guilty of a violation of this chapter and subject to a fine of \$500.00 for each violation. Each day such a violation is continued is a separate offense.