DIVISION 12. SPECIAL FLOOD HAZARD AREAS

Sec. 19-306. Purpose

The purpose of this division 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 City of East Providence elects to comply with the requirements of the National Flood Insurance Act of 1968 (P.L. 90-488, as amended).

Sec. 19-307. Applicability

(a) The Special Flood Hazard Areas are herein established as a floodplain overlay district. The District includes all special flood hazard areas within the City of East Providence designated as Zone A, AE, AH, AO, A99, V, or VE on the 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 City of East Providence are panel numbers 44007C337G, and 44007C339G dated March 2, 2009; 44007C317J, 44007C336H, 44007C338H, and 44007C451H dated September 18, 2013; and 44007C309K, 44007C326J, 44007C327H, 44007C328J, and 44007C329H, dated October 2, 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 dated September 18, 2013 and October 2, 2015. The office of Emergency Management 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 Emergency Management Agency and the Department of Public Works Engineering Division.

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

(c) *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.

(d) *Other Development*. For the purposes of this section, "other development" shall be defined as any action exclusive of that which requires the issuance of a building permit under the Rhode Island State Building Code. Such other development shall include, but not necessarily be limited to, the following:

- (1) Earth, gravel or mineral removal or extraction.
- (2) Alteration of the topography by cutting, filling or grading.
- (3) Storage of bulk materials outside of a structure.
- (4) Construction or placement of facilities or improvements not normally requiring a building permit.

(e) *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.

Sec. 19-308. 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 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".

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 known 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 complaint 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 resumed to be in violation until such time as that documentation is provided.

Sec. 19-309. Permit Required.

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.

Sec. 19-310. Permit Fee.

A permit fee (based on the cost of the construction) may be required to be paid to the City of East Providence 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.

Sec. 19-311. Notification of Watercourse Alteration.

(a) In a riverine situation, the Building Official or his/her designee 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.

(b) The Building Official or his/her designee shall 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

Sec. 19-312. Use Regulations

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)
- Revised Ordinances of the City of East Providence

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 the above state regulations.

Sec. 19-313. Other Use Regulations

(a) Construction Standards in Special Flood Hazard Areas (SFHA), Zones AH, AO, A1-30, and AE.

- (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 Providence County 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.
- (b) All subdivision proposals must be designed to assure that:
 - (1) Such proposals minimize flood damage;
 - (2) All public utilities and facilities are located and constructed to minimize or eliminate flood damage; and
 - (3) Adequate drainage is provided to reduce exposure to flood hazards.
- (c) 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:

- (1) The structure has a value less than \$1000;
- (2) 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;
- (3) The structure is not in the floodway;
- (4) The structure is not used for storage of hazardous materials;
- (5) The structure is used solely for parking of vehicles and/or limited storage;
- (6) The accessory must be wet floodproofed and designed to allow for the automatic entry and exit of flood water;
- (7) The accessory structure shall be firmly anchored to prevent flotation, collapse and lateral movement;
- (8) Service facilities such as electrical, mechanical and heating equipment must be elevated or floodproofed to or above the base flood elevation; and
- (9) The structure must not increase the flood levels in the floodway.
- (d) Existing contour intervals of site and elevations of existing structures must be included on plan proposal.
- (e) 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.
- (f) The space below the lowest floor shall be:
 - (1) 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
 - (2) 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,
 - (3) Designed with an enclosed area less than 300 square feet that is constructed with nonsupporting breakaway walls that have a design safe loading resistance of not less than 10 or more than 20 pounds per square foot.

Sec. 19-314. Base Flood Elevation and Floodway Data

(a) *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.

(b) *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.

(c) *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.

19.315. Enforcement.

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

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