

## ^ARTICLE 25

### **FLOOD HAZARD DISTRICTS**

(^Article inserted on March 26, 1982\*)

SECTION 25-1. **Statement of Purpose.** The purpose of this article is to promote the health and safety of the occupants of land against the hazards of flooding, to preserve and protect the streams and other water courses in the city and their adjoining lands, to protect the community against detrimental use and development, and to minimize flood losses, by provisions designed to:

1. Restrict or prohibit uses and structures which are dangerous to health, safety or property because of water hazards or which cause damaging increases in flood heights or flood velocities.
2. Consider flood plain management in neighboring areas.

SECTION 25-2. **Warning and Disclaimer of Liability.** The degree of flood protection required by this article is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods may occur. This article does not imply that areas outside designated flood hazard districts or land uses permitted within such districts will be free from flooding or flood damages. This article shall not create liability on the part of the City of Boston or any officer or employee thereof for any flood damages that may result from reliance on this article or from any administrative decision lawfully made thereunder.

^SECTION 25-3. **Definition and Location of Districts.** Flood hazard districts, also called special flood hazard areas, are defined as lands in a flood plain that are subject to a one percent probability of flooding in any given year. Such flooding is known as the base or 100-year flood. Flood hazard districts are a type of special overlay district established pursuant to Section 3-1A of the Code. These districts include all special flood hazard areas within the City of Boston designated as Zone A, AE, AH, AO, A99, V or VE and are shown on a series of map panels of the Suffolk County Flood Insurance Rate Map (FIRM), effective September 25, 2009, issued by the Federal Emergency Management Agency (FEMA) for the administration of the National Flood Insurance Program. The exact boundaries of the flood hazard districts may be defined by the 100-year base flood elevations shown on the FIRM and further defined by the Suffolk County Flood Insurance Study (FIS) report, effective September 25, 2009. The map identifies special flood hazard areas as A and V zones. V zones are certain coastal areas that are subject to additional hazard because of water velocity and waves. The maps also give the elevations of the base flood in feet above mean sea level (National American Vertical Datum of 1988).

A floodway is defined as the channel of a river or other waterway plus overbank areas that must be kept open in order to discharge the 100-year flood without increasing flood heights. One floodway, for Mother Brook in Hyde Park, is identified by FEMA on a map entitled "Flood Insurance Rate Map, Suffolk County, Massachusetts, City of Boston", effective September 25, 2009, on map panels 0069, 0088 and 0157.

The maps are based on a scientific and engineering study by FEMA entitled "Flood Insurance Study, Suffolk County, Massachusetts, All Jurisdictions" and preliminarily dated October 14, 2008.

Said study and the FIRM and Floodway maps and all maps which, by amendment by the Federal Emergency Management Agency, may be substituted therefore or made supplemental thereto shall be deemed to be, and are hereby made, a part of this code. Said maps and study are on file in the offices of the Building Department, the Conservation Commission, the Zoning Commission and the Engineering Division of the Public Works Department.

(^As amended on December 6, 1990, and September 10, 2009.)

**SECTION 25-4. Interpretation of Maps.** The Building Commissioner shall make interpretations, where needed, as to the exact boundaries of flood hazard districts or floodways. If the map information does not reflect actual site conditions in relation to the base flood elevation, said Commissioner may determine that a location is within or outside a flood hazard district, based on actual elevations provided by a registered professional surveyor or registered professional engineer. Such determination may be appealed to the Board of Appeal under the provisions of Section 5-2 of this code.

The City or an individual may appeal to the Federal Emergency Management Agency to amend the FIRM or Floodway maps or the Flood Insurance Study.

**SECTION 25-5. Regulations.** Development in flood hazard districts, including structural and non-structural activities and any manmade change to improved or unimproved real estate, such as buildings or other structures, dredging, filling, driving of piles, grading, paving, excavation or drilling operations, shall be subject to the following regulations, as well as to all applicable local, state, and federal regulations:

1. **Residential Construction.** New residential construction shall have the lowest floor, including basement, elevated to or above the base flood elevation.

2. **Nonresidential Construction.** New construction of any commercial, industrial or other nonresidential structure either shall have the lowest floor, including basement, elevated above the highest adjacent grade at least as high as the depth number specified in feet on the FIRM (at least two feet if no depth number is specified); or, together with attendant utility and sanitary facilities, shall:
  - (1) be floodproofed so that below the base flood level the structure is watertight with walls substantially impermeable to the passage of water; and
  - (2) have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy; and
  - (3) be certified by a registered professional engineer or architect that the standards of this subsection are satisfied. Such certifications shall be provided to the Building Commissioner.
3. **Pre-existing Structures.** In the case of a building or structure that lawfully exists or for which a building permit has been lawfully issued prior to the effective date of this article, the Board of Appeal may grant permission for reconstruction, structural change or extension thereof under the provisions of Section 9-1, provided that any nonconformity with items 1 and 2 above is not increased.
4. **Storage of Materials and Equipment.** Storage or processing of materials that are flammable, explosive or injurious to water quality or to human, animal or plant life is forbidden in any flood hazard district. Storage of other material or equipment shall be firmly anchored to prevent flotation or be readily removable from the area.
5. **Grading, Filling, Excavating, Dredging, Driving of Piles.** No building permit shall be issued for any work that involves grading, filling, excavating, dredging, driving of piles, paving or other activity that is subject to Chapter 131, Section 40, as amended, of the Massachusetts General Laws unless such work complies with a final order of conditions issued by the Boston Conservation Commission.
6. **Mobile Homes.** No mobile home shall be placed in a flood hazard district.
7. **Floodways.** In a designated floodway there shall be no encroachment, in the form of fill, new construction, substantial improvements, or other development, unless a technical evaluation

demonstrates that such encroachment will not result in any increase in flood levels during the base flood discharge.

8. **High Hazard Coastal Districts.** In any V zone, any structure or substantial improvement of any existing structure shall be located landward of the reach of mean high tide.
9. **Drainage Paths.** 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.

(^As amended on September 10, 2009.)

^SECTION 25-6. **Variances.** Subject to the provisions of Sections 7-2, 7-3, and 7-4, the Board of Appeal may, in a specific case and after public notice and hearing, grant a variance from the provisions of this article provided that the Board of Appeal finds that the proposed use or structure (a) will not derogate from the purpose of this article, (b) will comply with the provisions of the underlying subdistrict or subdistricts, (c) will not overload any public water, drainage or sewer system to such an extent that the proposed use or any developed use in the area or in any other area will be unduly subjected to hazards affecting health, safety or the general welfare, and (d) will not be located within a floodway unless it is demonstrated to the satisfaction of the Board of Appeal that there will be no increase in flood levels during the base flood discharge.

Such variances shall lapse and become null and void unless used within two years after the record of said Board's proceedings pertaining thereto is filed with the Building Commissioner pursuant to Section 8 of Chapter 665 of the Acts of 1956 as amended.

**Factors to be Considered.** In considering a petition for a variance from the provisions of this article, the Board of Appeal shall consider all technical evaluations, standards in other sections of the article and:

- a. the danger that materials may be swept onto other lands to the injury of others;
- b. the danger to life and property due to flooding;
- c. the susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
- d. the importance of the services provided by the proposed facility to the community;

- e. the necessity to the facility of a waterfront location, where applicable;
- f. the availability of alternative locations for the proposed use which are not subject to flood damage;
- g. the compatibility of the proposed use with existing and anticipated development;
- h. the relationship of the proposed use to the comprehensive plan and flood plain management program of the area;
- i. the safety of access to the property in times of flood for ordinary and emergency vehicles;
- j. the expected heights, velocity, duration, rate of rise, and sediment transport of the flood waters and the effects of wave action, if applicable, expected at the site; and
- k. the costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems, and streets and bridges.

**Procedures.** At the time a variance from item 1 or item 2 of Section 25-5 is issued, the Executive Secretary of the Board of Appeal shall notify the petitioner in writing that (1) construction permitted by said variance will be subject to increased flood insurance rates commensurate with the degree of nonconformity, and (2) construction below the base flood elevation increases risks to life and property.

The Board of Appeal shall maintain a record of all variances granted from Section 25-5, including justification for their issuance. Such variances shall be reported to the Federal Emergency Management Agency in such annual or periodic report as may be requested by the Agency.

**Historic Structures.** A variance from the provisions of this article may be granted by the Board of Appeal, after due notice and hearing, for the reconstruction or restoration of a structure, or of a structure in a district, which is listed in the National Register of Historic Places or which has been designated by the Boston Landmarks Commission under the provisions of Chapter 772 of the Acts of 1975, even though the requirements of this section are not met.

(^As amended on December 6, 1990)

^SECTION 25-6A. **Exceptions.** Subject to the provisions of Article 6A, the Board of Appeal may, in a specific case and after public notice and hearing, grant

an exception to the requirement in Section 25-5.8, provided that the project for fill, new construction, substantial improvement, or other development has received a Conditional Letter of Map Revision (CLOMR) from the Federal Emergency Management Agency.

(^Inserted on December 6, 1990)

**SECTION 25-7. Application.** The provisions of this article are not intended to repeal, amend, abrogate, annual, or interfere with any lawfully adopted statutes, ordinances, covenants, regulations or rules. However, where this article imposes greater restrictions, the provisions of this article shall govern. (Note: The jurisdiction of the Boston Conservation Commission under Chapter 131, Section 40, of the Massachusetts General Laws includes areas not shown on the FIRM and Floodway maps.)

(\*Article 25 was originally inserted on March 24, 1977 and was replaced in its entirety on March 26, 1982.)