

## **ARTICLE \_\_\_\_ - AMEND ZONING BY-LAWS ARTICLE 200 AND ARTICLE 400 – REVISED FEMA FLOOD INSURANCE RATE MAPS**

To see if the town will vote to amend the Duxbury Protective Bylaw Article 200 – Establishment of Districts, Section 202.1 “Zoning Map” Section 202.2 “District Boundary Line Descriptions” in order to adopt the Plymouth County Flood Insurance Rate Map dated effective November 4, 2016, in order to reference the latest Flood Insurance Rate Maps; and to amend the Duxbury Protective Bylaw Article 400 – Use, Intensity, Dimensional and Coverage Regulations for All Districts, Section 402 “Flood Hazard Areas Overlay District,” in order to replace the existing section with a new section using language recommended by the Federal Emergency Management Agency and the Commonwealth of Massachusetts Department of Conservation and Recreation Flood Hazard Management Program for Flood Hazard Areas Overlay Districts; or take any other action in relation thereto.

Board of Selectmen and Town Manager

**Explanation:** The US Department of Homeland Security’s Federal Emergency Management Agency (FEMA) has issued a new Flood Insurance Rate Map (FIRM) and Flood Insurance Study (FIS) which will become effective on November 4, 2016. This article will enable the Town to continue to participate in the National Flood Insurance Program which allows homeowners and businesses to purchase flood insurance through federal programs and which maintains eligibility for (1) federal grants and loans in identified flood hazard areas and (2) federal disaster assistance to repair insurable buildings and structures located in identified flood hazard areas for damage caused by a flood.

### **ARTICLE 202 LOCATION OF DISTRICTS**

#### **202.1 Zoning Map**

~~Said districts are located and bounded as delineated on the "Official Town of Duxbury, Massachusetts Zoning Map," which is hereby adopted by reference as a part of this bylaw. The Official Zoning Map shall be attested by the Town Clerk, bear the official seal of the Town of Duxbury, dated March 2009 as created by Greatwall GIS Services consisting of seven (7) sheets in total as revised and amended to date and is on file in the office of the Town Clerk, and on file in the office of the Town Clerk including the Wetland and Watershed Protection District Map dated March 4, 1971, as revised and amended to date and on file in the office of Town Clerk, and an Aquifer Protection District Map, dated January 15, 1986, as revised and amended March 24, 1993 and December 4, 2002 on file in the office of Town Clerk, and a the Duxbury Flood Insurance Rate Map (DFIRM) dated May 17, 2005 as defined in Article 402 and on file in the office of the Town Clerk. The zoning map with boundaries of the districts and all explanatory matter thereon is hereby made a part of this Bylaw. Any conflict between the map and the description of any district in the written terms of this Bylaw shall be resolved according to the written terms.~~ Said districts are located and bounded as delineated on the Town of Duxbury, Massachusetts Official Zoning Map (the “Official Zoning Map”) on file in the office of the Town Clerk. The Official Zoning Map with boundaries of the districts and all explanatory matter thereon is hereby made a part of this Bylaw. Any conflict between the map and the description of any district in the written terms of this Bylaw shall be resolved according to the written terms.

## **202.2 District Boundary Line Descriptions**

9. Boundaries of the Flood Hazard Areas Overlay District are shown and set forth in the ~~Duxbury~~ Plymouth County Flood Insurance Rate Map (~~D~~FIRM), ~~dated May 17, 2005~~ as defined in Article 402, on file in the Office of Town Clerk and in the Planning Board Office.

## **402 FLOOD HAZARD AREAS OVERLAY DISTRICT**

### **402.1 Purpose of the Flood Hazard Areas Overlay District**

The purposes of the Flood Hazard Areas Overlay District are to:

1. Ensure public safety through reducing the threats to life and personal injury;
2. Eliminate new hazards to emergency response officials;
3. Prevent the occurrence of public emergencies resulting from water quality, contamination, and pollution due to flooding;
4. Avoid the loss of utility services which if damaged by flooding would disrupt or shut down the utility network and impact regions of the Town beyond the site of flooding;
5. Eliminate costs associated with the response and cleanup of flooding conditions; and
6. Reduce damage to public and private property resulting from flooding waters.

### **402.2 Flood Hazard Areas Overlay District Boundaries**

The Flood Hazard Areas Overlay District shall be considered an overlay district throughout the Town. It shall include all special flood hazard areas within the Town, as shown and set forth in the Plymouth County Flood Insurance Rate Map (FIRM), panels 25023C0207J, 0209J, 0216J, 0217J, 0219J, 0236J, all dated July 17, 2012, and panels 25023C0226K, 0228K, 0229K, 0233K, 0234K, 0237K, 0238K, 0239K, 0241K, 0242K, 0243K, 0244K, AND 0263K all dated November 4, 2016, issued by the Federal Emergency Management Agency (FEMA) for the administration of the National Flood Insurance Program (NFIP) designated as Zones A, AE, AO and VE, which indicate the 100-year regulatory floodplain. 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 Flood Insurance Study (FIS) report dated November 4, 2016. The FIRM and FIS report are incorporated herein by reference and are on file with the Town Clerk, and available for viewing in the Planning Department.

### **402.3 Compliance with Other Law and Regulations**

All development in the district, including structural and non-structural activities, whether permitted by right or by special permit must be in compliance with statute and regulations, except that provisions of this Section that are more restrictive shall apply.

1. Massachusetts General Laws, Chapter 131, Section 40;
2. Sections of the Massachusetts State Building Code (780 CMR) which address floodplain and coastal high hazard areas;

3. Coastal Wetlands Restriction, DEP (currently 310 CMR 12.00);
4. Minimum Requirements for the Subsurface Disposal of Sanitary Sewage, DEP (currently 310 CMR 15, Title 5);

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.

#### **402.4 BASE FLOOD ELEVATION AND FLOODWAY DATA**

1. **Floodway Data.** In Zone A 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 Town 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 five (5) acres, whichever is the lesser, within unnumbered A zones.

#### **402.5 NOTIFICATION OF WATERCOURSE ALTERATION**

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

1. The Chief Executive Officer of adjacent Cities and Towns
2. NFIP State Coordinator  
Massachusetts Department of Conservation and Recreation  
251 Causeway Street, Suite 600-700  
Boston, MA 02114-2104
3. NFIP Program Specialist  
Federal Emergency Management Agency, Region I  
99 High Street, 6th Floor  
Boston, MA 02110

#### **402.6 Other Use Regulations**

1. Within Zone AO on the FIRM, adequate drainage paths must be provided around structures on slopes, to guide floodwaters around and away from proposed structures.
2. In Zone AE, along watercourses that have a regulatory floodway designated on the 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.
3. Man-made alteration of sand dunes within Zone VE which would increase potential flood damage are prohibited.
4. All new construction and substantial improvements to existing structures within Zone VE must be located landward of a boundary line of the Wetlands Protection Overlay District, except those structures allowed by sub-sections 404.9 or 404.11.

5. 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.
6. Existing site contours and elevations of existing structures shall be included on plan proposals.

#### **402.7 Permitted Uses**

The following uses of low flood damage potential and causing no obstructions to flood flows are allowed, provided they are permitted in the underlying district and they do not require structures, fill, or storage of materials or equipment:

1. Agricultural uses such as farming, grazing, truck farming, and horticulture.
2. Forestry and nursery uses.
3. Outdoor recreational uses, including fishing, boating, and play areas.
4. Conservation of water, plants, and wildlife.
5. Wildlife management areas, and foot, bicycle, and/or horse paths.
6. Temporary non-residential structures used in connection with fishing, growing, harvesting, storage, or sale of crops raised on the premises.
7. Man-made alteration of sand dunes for dune restoration and beach enhancement projects for the purposes of flood and erosion control to adapt to the long-term effects of sea level rise.

#### **402.8 Definitions**

**BASE FLOOD** means the flood having a one percent chance of being equaled or exceeded in any given year.

**FLOOD INSURANCE RATE MAP (FIRM)** means the official map of a community on which FEMA has delineated both the areas of special flood hazard and the risk premium zones applicable to the community.

**FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA)** administers the National Flood Insurance Program. FEMA provides a nationwide flood hazard area mapping study program for communities as well as regulatory standards for development in the flood hazard areas.

**FLOOD INSURANCE STUDY (FIS)** means an examination, evaluation, and determination of flood hazards, and, if appropriate, corresponding water surface elevations, or an examination, evaluation and determination of flood-related erosion hazards.

**FLOODWAY** means 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.

**LOWEST FLOOR** means the lowest floor of the lowest enclosed area (including basement or cellar). 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 NFIP Regulations 60.3.

**SPECIAL FLOOD HAZARD AREA** means an area having special flood and/or flood-related erosion hazards, and shown on the FIRM as Zones A, AO, AE and VE.

**STRUCTURE** means, 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. **STRUCTURE**, for insurance coverage purposes, means a walled and roofed building, other than a gas or liquid storage tank, that is principally above ground and affixed to a permanent site, as well as a manufactured home on foundation. For the latter purpose, the term includes a building while in the course of construction, alteration, or repair, but does not include building materials or supplies intended for use in such construction, alteration, or repair, unless such materials or supplies are within an enclosed building on the premises.

**SUBSTANTIAL DAMAGE** means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before-damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.

**SUBSTANTIAL IMPROVEMENT** means any repair, reconstruction, or improvement of a structure, the cost of which equals or exceeds fifty (50) percent of the market value of the structure either (a) before the improvement or repair is started, or (b) if the structure has been damaged and is being restored, before the damage occurred. For the purposes of this definition, "substantial improvement" is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure.

**ZONE A** means the 100-year floodplain area where the base flood elevation (BFE) has not been determined. To determine the BFE, use the best available federal, state, local, or other data.

**ZONE AE** (for new and revised maps) means the 100-year floodplain where the base flood elevation has been determined.

**ZONE AO** means the 100-year floodplain with flood depths of one (1) to three (3) 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.

**ZONE VE** (for new and revised maps) means a special flood hazard area along a coast subject to inundation by the 100-year flood with additional hazards due to velocity (wave action). Base flood elevations have been determined.

**ZONE X** identifies areas in the Town that the Flood Insurance Study has determined as areas of moderate or minimal flood hazard.