

COMMONWEALTH OF MASSACHUSETTS

UPDATED ARTICLE 31, 3.25.24, 5.30 PM JBL

**ARTICLE 31:** To see if the Town will amend the Zoning Bylaws to establish a Floodplain Overlay District Bylaw as follows, with numbering to be done by the Town Clerk if necessary:

§ 410-3.8 Floodplain District.

**A.**

The Floodplain District is herein established as an overlay district. The District includes all special flood hazard areas designated on the Plymouth County Flood Insurance Rate Map (FIRM) issued by the Federal Emergency Management Agency for the administration of the National Flood Insurance Program, effective date July 3, 2024. These maps indicate the 1%-chance regulatory floodplain. The exact boundaries of the District shall be defined by the 1%-chance base flood elevations shown on the Plymouth County FIRM and further defined by the Plymouth County Flood Insurance Study (FIS) report effective date July 3, 2024. The effective FIRM and FIS report are incorporated herein by reference and are on file with the Town Clerk, Planning Board, Building Commissioner, and Climate Adaptation & Conservation Dept.

**B.**

Use Regulations: The use regulations governing the Floodplain District of Hull are in § **410-4.2**, Floodplain District use and development regulations, of these zoning Bylaws. Important state regulations concerning floodplain areas are referenced therein.

**§ 410-4.2. Floodplain District use and development.**

A. The purpose of the Floodplain Overlay District is to:

- 1) Ensure public safety through reducing the threats to life and personal injury.
- 2) Eliminate new hazards to emergency response Commissioners.
- 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 community beyond the site of flooding.
- 5) Eliminate costs associated with the response and cleanup of flooding conditions.
- 6) Reduce damage to public and private property resulting from flooding waters.
- 7) Preserve the natural flood control characteristics and the flood storage capacity of the floodplain.
- 8) Minimize potential loss of life, destruction of property, and environmental damage resulting from the projected impacts of a warming climate, including extreme rain events and relative sea level rise.

B. Designation of Floodplain Administrator

The Town of Hull hereby designates the position of Floodplain Administrator to be the *Building Commissioner* for the Town. In the event the Building Commissioner is not available, the Director of Climate Adaptation and Conservation shall act as the Administrator or such other administrative employee designated by the Town Manager

C. Permit Requirements

The Town of Hull requires a permit for all proposed construction or other development in the floodplain overlay district, including new construction or changes to existing buildings, placement of manufactured homes, placement of agricultural facilities, fences, sheds, storage facilities or drilling, mining, paving and any other development that might increase flooding or adversely impact flood risks to other properties.

Hull's permit review process includes the requirement that the applicant obtain all local, state and federal permits that will be necessary in order to carry out the proposed development in the floodplain overlay district. The applicant must acquire all necessary permits, and must demonstrate that all necessary permits have been acquired.

- (1) All development in the district, including structural and non-structural activities, whether permitted by right, by special permit or by variance, must be in compliance with Chapter 131, Section 40 of the Massachusetts General Laws and with the following:
  - (a) Sections of the Massachusetts State Building Code (780 CMR) which address floodplain and coastal high hazard areas;
  - (b) Wetlands Protection Regulations, Department of Environmental Protection (DEP) (currently 310 CMR 10.00);
  - (c) Inland Wetlands Restriction, DEP (currently 310 CMR 13.00);
  - (d) Coastal Wetlands Restriction, DEP (currently 310 CMR 12.00);
  - (e) Minimum Requirements for the Subsurface Disposal of Sanitary Sewage, DEP (currently 310 CMR 15, Title 5);

Permit applicants in the Floodplain Overlay District shall be made aware of future flood risk including the projected frequency and depth of flooding as shown on the Hull's MC-FRM "2.4 Foot Sea Level Rise" map dated 05/19/2022, and on the "1.2 Foot Sea Level Rise Flood Depth" map dated 05/19/2022, or the most current version of the MC-FRM (or latest state-adopted projection models), on file with the Town Clerk, Building Commissioner, Planning Board, and Department of Climate Adaptation and Conservation. Applications for new construction and/or substantial improvement of 3 or more residential units, new construction and/or substantial improvement of nonresidential structures shall include (1) a narrative, on a form designated by the Town, describing proposed methods to minimize future flood impacts to the property and surrounding areas, and (2) if relevant, include on site plans 1%-chance BASE FLOOD elevation predicted for 2.4 Foot Sea Level Rise. The future flood risk maps and GIS data layers are for planning purposes. Building Code flood resistant regulations apply only to the FEMA FIRMs.

#### E. Floodway Encroachment

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.

In Zones A1-30 and AE, along watercourses that have a regulatory floodway designated on the Town's FIRM encroachments are prohibited, including fill, new construction, substantial improvements, and other development within the adopted regulatory floodway unless it has been demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that the proposed encroachment would not result in any increase in flood levels within the community during the occurrence of the base flood discharge.

#### F. Unnumbered A Zones

In A Zones, in the absence of FEMA BFE data and floodway data, the Building Department will obtain, review and reasonably utilize base flood elevation and floodway data available from a Federal, State, or other source as criteria for requiring new construction, substantial improvements, or other development in Zone A as the basis for elevating residential structures to or above base flood level, for floodproofing or elevating nonresidential structures to or above base flood level, and for prohibiting encroachments in floodways.

#### G. AO and AH zones drainage requirements

Within Zones AO and AH on the FIRM, adequate drainage paths must be provided around structures on slopes, to guide floodwaters around and away from proposed structures.

#### H. Subdivision proposals

All subdivision proposals and development proposals in the floodplain overlay district shall be reviewed to assure that:

- (a) Such proposals minimize flood damage.
- (b) Public utilities and facilities are located & constructed so as to minimize or eliminate flood damage.
- (c) Adequate drainage is provided to reduce exposure to flood hazards.

When proposing subdivisions or other developments in the Federal Floodplain District greater than 50 lots or 5 acres (whichever is less), the applicant must provide technical data to determine base flood elevations for each developable parcel shown on the design plans.

#### I. Recreational vehicles

In A1-30, AH, AE Zones, V1-30, VE, and V Zones, all recreational vehicles to be placed on a site must be elevated and anchored in accordance with the zone's regulations for foundation and elevation requirements or be on the site for less than 180 consecutive days or be fully licensed and highway ready.

#### J. Protection of dunes

Man-made Alteration of sand dunes within the Zone VE which would increase potential flood damage are is prohibited.

All new construction within Zone VE must be located landward of the reach of mean high tide.

#### K. Watercourse alterations

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

- Adjacent Communities, especially upstream and downstream
- Bordering States, if affected
- NFIP State Coordinator  
Massachusetts Department of Conservation and Recreation
- NFIP Program Specialist  
Federal Emergency Management Agency, Region I

#### L. Requirement to Submit New Technical Data

If the Town acquires data that changes the base flood elevation in the FEMA mapped Special Flood Hazard Areas, the Town will use its best efforts, within 6 months, to notify FEMA of these changes by submitting the technical or scientific data that supports the change(s). Notification shall be submitted to:

- NFIP State Coordinator  
Massachusetts Department of Conservation and Recreation
- NFIP Program Specialist  
Federal Emergency Management Agency, Region I

#### M. Variances to building code floodplain standards

The Town will request from the State Building Code Appeals Board a written and/or audible copy of the portion of the hearing related to the variance, and will maintain this record in the community's files.

The Town shall also issue a letter to the property owner regarding potential impacts to the annual premiums for the flood insurance policy covering that property, in writing over the signature of the Floodplain Administrator that (i) the issuance of a variance to construct a structure below the base flood level will result in increased premium rates for flood insurance up to amounts as high as \$25 for \$100 of insurance coverage and (ii) such construction below the base flood level increases risks to life and property.

Such notification shall be maintained with the record of all variance actions for the referenced development in the floodplain overlay district.

#### N. Variances to local Zoning Ordinances related to community compliance with the National Flood Insurance Program (NFIP).

A variance from these floodplain ordinances must meet the requirements set out by State law and may only be granted if: 1) Good and sufficient cause and exceptional non-financial hardship exist; 2) the variance will not result in additional threats to public safety, extraordinary public expense, or fraud of the public; and 3) the variance is the minimum action necessary to afford relief.

#### O. Abrogation and Greater Restriction

The floodplain management regulations found in this Floodplain Overlay District shall take precedence over any less restrictive conflicting Zoning Ordinance provision.

#### P. Disclaimer of Liability

The degree of flood protection required by this ordinance is considered reasonable but does not imply total flood protection. Nothing contained herein or any act taken or not taken relative to this bylaw shall be construed to be a specific assurance of safety or assistance.

#### Q. Severability

If any section, provision, or portion of this ordinance is deemed to be unconstitutional or invalid by a court, the remainder of the ordinance shall be effective.

#### R. Definitions

**AREA OF SPECIAL FLOOD HAZARD** — Is the land in the floodplain within a community subject to a 1% or greater chance of flooding in any given year. The area may be designated as Zone A, AO, AH, A1-30, AE, A99, V1-30, VE or V.

**BASE FLOOD** — Means the flood having a 1% chance of being equaled or exceeded in any given year.

**COASTAL HIGH HAZARD AREA** — Means an area of special flood hazard extending from offshore to the inland limit of a primary frontal dune along an open coast and any other area subject to high velocity wave action from storms or seismic sources. The area is designated on a FIRM as Zone V, V1-30, VE.

**DEVELOPMENT** means any man-made change to improved or unimproved real estate, including but not limited to building or other structures, mining, dredging, filling, grading, paving, excavation

or drilling operations or storage of equipment or materials. [US Code of Federal Regulations, Title 44, Part 59]

**FLOOD INSURANCE RATE MAP (FIRM)** — means an 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.

**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.** The channel of the river, creek 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. [International Building Code, Chapter 2, Section 202]

**FUNCTIONALLY DEPENDENT USE** means a use which 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, but does not include long-term storage or related manufacturing facilities. [US Code of Federal Regulations, Title 44, Part 59] Also [Referenced Standard ASCE 24-14]

**HIGHEST ADJACENT GRADE** means the highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure. [US Code of Federal Regulations, Title 44, Part 59]

**HISTORIC STRUCTURE** means any structure that is:

- (a) Listed individually in the National Register of Historic Places (a listing maintained by the Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;
- (b) Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary 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.

[US Code of Federal Regulations, Title 44, Part 59]

**NEW CONSTRUCTION.** Structures for which the start of construction commenced on or after the effective date of the first floodplain management code, regulation, ordinance, or standard adopted by the authority having jurisdiction, including any subsequent improvements to such structures. *New construction includes work determined to be substantial improvement.* [Referenced Standard ASCE 24-14]

**RECREATIONAL VEHICLE** means a vehicle which is:

- (a) Built on a single chassis;
- (b) 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 temporary living quarters for recreational, camping, travel, or seasonal use.

[US Code of Federal Regulations, Title 44, Part 59]

REGULATORY FLOODWAY - see FLOODWAY.

SPECIAL FLOOD HAZARD AREA. The land area subject to flood hazards and shown on a Flood Insurance Rate Map or other flood hazard map as Zone A, AE, A1-30, A99, AR, AO, AH, V, VO, VE or V1-30. [Base Code, Chapter 2, Section 202]

START OF CONSTRUCTION. The date of issuance for new construction and substantial improvements to existing structures, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, placement or other improvement is within 180 days after the date of issuance. The actual start of construction means the first placement of permanent construction of a building (including a manufactured home) on a site, such as the pouring of a slab or footings, installation of pilings or construction of columns.

Permanent construction does not include land preparation (such as clearing, excavation, grading or filling), the installation of streets or walkways, excavation for a basement, footings, piers or foundations, the erection of temporary forms or the installation of accessory buildings such as garages or sheds not occupied as dwelling units or not part of the main building. 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. [Base Code, Chapter 2, Section 202]

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 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 DAMAGES. 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. Any repair, reconstruction, rehabilitation, addition or improvement of a building or structure, the cost of which equals or exceeds 50 percent of the market value of the structure before the improvement or repair is started. If the structure has sustained substantial damage, any repairs are considered substantial improvement regardless of the actual repair work performed. The term does not, however, include either:

1. Any project for improvement of a building required to correct existing health, sanitary or safety code violations identified by the Building Commissioner and that are the minimum necessary to assure safe living conditions.
2. Any alteration of a historic structure provided that the alteration will not preclude the structure's continued designation as a historic structure. [Base Code Section 1612.2]

SUBSTANTIAL REPAIR OF A FOUNDATION. When work to repair or replace a foundation results in the repair or replacement of a portion of the foundation with a perimeter along the base of the foundation that equals or exceeds 50% of the perimeter of the base of the foundation measured in linear feet, or repair or replacement of 50% of the piles, columns or piers of a pile,

column or pier supported foundation, the Building Commissioner shall determine it to be substantial repair of a foundation. Applications determined by the Building Commissioner to constitute substantial repair of a foundation shall require all existing portions of the entire building or structure to meet the requirements of 780 CMR. [As amended by MA in 9th Edition BC]

VARIANCE means a grant of relief by a community from the terms of a flood plain management regulation. [US Code of Federal Regulations, Title 44, Part 59]

VIOLATION means the failure of a structure or other development to be fully compliant with the community's flood plain management regulations. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in §60.3(b)(5), (c)(4), (c)(10), (d)(3), (e)(2), (e)(4), or (e)(5) is presumed to be in violation until such time as that documentation is provided. [US Code of Federal Regulations, Title 44, Part 59]

ZONE AE — Means area of special flood hazard with water surface elevations determined.

ZONE AO — Means area of special flood hazards having shallow water depths and/or unpredictable flow paths between (1) and (3) ft. (Velocity flow may be evident; such flooding is characterized by ponding or sheet flow.)

ZONE VE — means area of special flood hazards, with water surface elevations determined and with velocity, that is inundated by tidal floods (coastal high hazard area).

*A variance from this FP Bylaw must meet the requirements set out by State law and may only be granted if a good and sufficient cause and exceptional non-financial hardship exist; 2) the variance will not result in additional threats to public safety, extraordinary public expense, or fraud or victimization of the public; and 3) the variance is the minimum action necessary to afford relief.*

or take any other action relative thereto. (Inserted by the Building Commissioner and the Director of Climate Adaptation and Conservation)