

COMPREHENSIVE DEVELOPMENT ORDINANCE--
Amendment related to Special Flood Hazard Area Regulations
#ZA 10-08

That Appendix A, Comprehensive Development Ordinance, of the Code of Ordinances of the City of Burlington be and hereby is amended by amending Sections 3.1.2, 4.5.4 and Sec. 13.1.2 Part 2 thereof to read as follows:

Sec. 3.1.2 Zoning Permit Required

Except for that development which is exempt from a permit requirement under **Sec. 3.1.2(c)** below, no development may be commenced within the city without a zoning permit issued by the administrative officer including but not limited to the following types of exterior and interior work:

- (a) As written
- (b) As written
- (c) **Exemptions:**

The following shall be exempt from the requirements of this Ordinance and shall not be required to obtain a zoning permit:

1. Exterior modifications to a single family dwelling in a non-design review portion of the RL zoning district lawfully in existence prior to the adoption of this ordinance on a conforming lot, and not on or eligible for listing on the State or National Register of Historic Places. Such an exemption shall not be applicable to any of the following changes, which do require a zoning permit:
 - A. Increased lot coverage;
 - B. Increased habitable living space;
 - C. Changes in setbacks or building footprints; and

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D. Construction of additional stories to an existing structure.

E. Improvements in a Special Flood Hazard Area.

(2) – (6) As written pursuant to #ZA 10-05 (adopted June 28, 2010)

7. Accepted agricultural and silvicultural practices, including the construction of farm structures, as those practices are defined by the secretary of agriculture, food and markets or the commissioner of forests, parks and recreation, respectively, under **10 VSA §1021(f)** and **1259(f)** and **6 VSA §4810**. Prior to the construction of farm structures the farmer must notify the Administrative Officer in writing of the proposed activity. The notice must contain a sketch of the proposed structure including setbacks.

(8) As written pursuant to #ZA 10-05 (adopted June 28, 2010)

(d) (e) Determination of Non-Applicability. As written

Sec. 4.5.4 Natural Resource Protection Overlay (NR) District

(a) As written

(b) Areas Affected

This overlay district ~~includes~~ consists of all areas delineated on **Map 4.5.4-1-Natural Resources Protection Overlay** (NR) District and is divided into four (4) subparts:

(1) – (3) As written

4. A **Special Flood Hazard Area** which consists of all areas in the City of Burlington, Vermont identified as special flood hazard areas in and on the most current flood insurance studies and maps of the Department of Homeland Security (DHS), Federal Emergency Management Agency (FEMA), National Flood Insurance Program (NFIP), as provided by the Secretary of the Agency of Natural Resources pursuant to 10 V.S.A. § 753, which are hereby adopted by reference and declared to be part of these regulations.

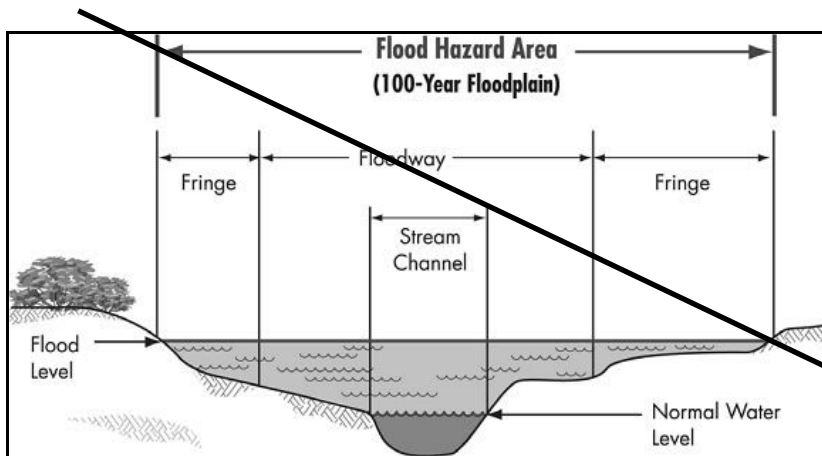
~~The area that would be inundated by the base flood is called a "Special Flood Hazard Area"~~

~~(SFHA). The SFHA is the land in the floodplain subject to a one percent or greater chance of~~

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~~flooding in any given year (also known as the 100-year floodplain) and is designated as Zone AE on the City of Burlington's flood maps.~~

~~The SFHA is composed of the floodway and the flood fringe. The floodway is the stream channel and that portion of the adjacent floodplain that must remain open to permit passage of the base flood without cumulatively increasing the water surface elevation more than one foot at any point. Floodwaters generally are deepest and swiftest in the floodway, and anything in this area is in the greatest danger during a flood. The remainder of the floodplain is called the flood fringe, where water may be shallower and slower. The following figure illustrates the relationship between the floodway and flood fringe.~~



~~Illustration courtesy of the University of New Hampshire (UNH) Complex System Research Center (CSRC).~~

(c) – (e) As written

(f) District Specific Regulations: Special Flood Hazard Area:

1. Additional Application Requirements

The following information shall be submitted in addition to the applicable requirements of **Article 3** for any development proposed within a Special Flood Hazard Area:

- A. Base flood elevation data for all subdivision proposals and other proposed new developments containing more than fifty (50) lots or covering more than five (5) acres;

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- B. The elevation, in relation to mean sea level, of the lowest ~~habitable~~ floor, including basement, of all new construction or substantial improvements of structures;
- C. Confirmation if such structures contain a basement; and
- D. The elevation, in relation to mean sea level, to which any structure has been flood proofed.
- E. A Vermont Agency of Natural Resources Project Review Sheet for the proposal should be filled out. The Project Review Sheet should identify all State and Federal agencies from which permit approval is required for the proposal, and shall be filed as a required attachment to the ~~Town~~ City permit application. The identified permits, or letters indicating that such permits are not required, shall be submitted to the Administrative Officer and attached to the permit application before work can begin.

In addition, the DRB shall require of the applicant any of the following information deemed necessary for determining the suitability of the particular site for the proposed use:

(F) – (I) As written

2. ***Permitted Uses in Floodway Areas. As written***
3. ***Permitted and Conditional Uses in Special Flood Hazard Areas (including Floodway areas)***
 - A. All those permitted open space uses as listed in **Section 4.5.4.(f).2** above shall be permitted in the Special Flood Hazard Areas.
 - B. All other uses permitted in the underlying zoning district are permitted only upon the granting of a conditional use by the DRB as per **Article 3**.
4. ***Permitted Accessory Uses in Special Flood Hazard Areas (Including Floodway areas) As written***
5. ***Mandatory DEC Notification and 30-Day Review Period***
 - A. Prior to issuing a permit a copy of the application and supporting information shall be submitted by the administrative officer to the State National Floodplain Insurance Program Coordinator at the Vermont Agency of Natural Resources, Department of Environmental Conservation, River Management Section in accordance with **24 V.S.A. § 4424**. A permit may be issued only following receipt of comments from the Agency or the expiration of 30 days from the date the application was mailed to the Agency, whichever is sooner.

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B. Adjacent communities and the Stream Alteration Engineer at the Vermont Agency of Natural Resources, Department of Environmental Conservation, River Management Section shall be notified at least 30 days prior to issuing any permit for the alteration or relocation of a watercourse and copies of such notification shall be submitted to the ~~Administrator of the VT~~ National Flood Insurance Program Coordinator.

C. No permit may be granted for new construction, substantial improvement, filling, installation of a residential structure, or the development of land in any area designated as a floodplain by the Federal Emergency Management Agency (FEMA) prior to the expiration of a period of thirty (30) days following the submission of the application and a report ~~describing the proposed use, the location requested and an evaluation of the effect of such proposed use on Burlington's municipal development plan and the regional plan, if any~~ to the Department of Environmental Conservation ~~provided this subsection shall not be applicable to public utility generating stations and transmission lines which shall require the issuance of a certificate of public good under 30 V.S.A. 248 prior to any land filling or construction.~~ The application and report shall describe the proposed use, the location requested and an evaluation of the effect of such proposed use on Burlington's municipal development plan and the regional plan, if any.

D. This subsection shall not be applicable to public utility generating stations and transmission lines which shall require the issuance of a certificate of public good under 30 V.S.A. § 248 prior to any land filling or construction.

6. Evaluation

In reviewing the application, the DRB shall consider the evaluation of the Department of Environmental Conservation and shall determine that the proposed use will conform to the development standards of subpart 7 ~~10~~ below.

7. Special Review Criteria *As written*

8. Approval Conditions

Upon consideration of those factors in subpart 7 ~~10~~ above and the purposes of these regulations, the DRB shall attach the following conditions to any permit it chooses to grant.

In Floodway Areas such conditions require that:

A. As written.

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B. As written.

In all Special Flood Hazard Areas (including Floodway areas) such conditions require that:

C. All development:

- (i) New construction and/or substantial improvements to structures shall be reasonably safe from flooding and be:
 - 1. Designed and adequately anchored to prevent flotation, collapse, or lateral movement during the occurrence of the base flood;
 - 2. Constructed of materials resistant to flood damage;
 - 3. Constructed by methods and practices that minimize flood damage; and
 - 4. Constructed with electrical, heating, ventilation, plumbing and air conditioning equipment and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding;
- (ii) All development shall be designed to minimize flood damage to the proposed development and to public facilities and utilities;
- (iii) All development shall be designed to provide adequate surface drainage to reduce exposure to flood hazards;
- (iv) All new construction and substantial improvements that have fully enclosed areas below the lowest floor ~~that are usable solely for parking of vehicles, building access or storage shall have permanent openings, designed to allow entry and exit of flood waters in accordance with specifications of the Code of Federal Regulations; 44 CFR 60.3(e)(5) shall:~~
 - 1. Be solely used for parking of vehicles, storage, or building access, and such a condition shall clearly be stated on any permits; and,
 - 2. Be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Such designs must be certified by a registered professional engineer or architect, or meet or exceed the following minimum criteria: A minimum of two openings of two walls having a total net area of not less than one square inch for every square foot of enclosed area subject

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to flooding shall be provided. The bottom of all openings shall be no higher than one foot above grade. Openings may be equipped with screens, louvers, valves, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters;

- (v) All necessary permits shall be obtained from those governmental agencies from which approval is required by federal or state law.

D. Residential Development:

- (i) All new and substantially improved residential structures within Special Flood Hazard Area have the lowest floor, including basement, elevated one foot or more at least at or above the base flood elevation;
- (ii) All new, replacement or substantially improved manufactured homes in the Special Flood Hazard Area shall be elevated on a permanent foundation such that the lowest floor of the manufactured home is elevated ~~to no less than~~ one foot or more above the base flood elevation and be securely anchored to an adequately anchored foundation system to resist floatation, collapse, and lateral movement during the occurrence of the base flood. The manufactured home may be elevated on properly compacted fill such that the top of the fill (the pad) under the entire manufactured home is above the base flood elevation OR so that the lowest floor is supported by reinforced piers or other foundation elements of at least equivalent strength that are no less than one foot in height above the base flood elevation.

E. Non-Residential Development:

- (i) All new construction and substantial improvements for nonresidential purposes shall have the lowest floor, including basement, elevated ~~to or~~ one foot or more above the base flood elevation. Existing non-residential structures may be flood proofed where ~~or be~~ designed to be watertight to one foot or more above ~~below~~ the base flood elevation, with walls substantially impermeable and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. A permit for a proposed building to be flood proofed shall not be issued until a registered architect or engineer has reviewed the structural design,

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specifications and plans and has certified that the design and methods of construction are in accordance with meeting the provisions of this subsection.

- F. Water Supply Systems: As written.
- G. On-Site Waste Disposal Systems: As written.
- H. Recreational Vehicles: As written.

9. *Records*

The administrative officer shall maintain a record of:

- A. All permits issued in areas covered by this bylaw;
- ~~B.A.~~ An Elevation Certificate with the as-built The elevation, in relation to mean sea level, of the lowest floor, including basement, of all new or substantially improved structures, and whether or not such structures contain a basement in the Special Flood Hazard Area; and
- ~~C.B.~~ The elevations, in relation to mean sea level, to which existing structures have been flood-proofed.
- ~~D. C.~~ Any certification of floodproofing.

10. *Variances*

Variances to the above standards may be granted in writing by the DRB only in accordance with ~~24 V.S.A. §~~ Article 12 and 44 CFR Section 60.6, and after a hearing noticed in the same manner as for a conditional use. ~~Variances are generally limited to repair, relocation, replacement or enlargement of a non-complying or historic structure (provided the proposed repair or rehabilitation will not preclude the structure's continued designation as an historic structure), or a necessary development functionally dependent on stream access.~~

A. **Review Criteria.**

A decision in favor of the appellant shall be granted if all the following facts are found, and the supporting findings are specified in the decision. The variance, if authorized shall be issued by the DRB only upon:

- (i) ~~the variance, if authorized shall be issued by the DRB only upon:~~ (a) determination that failure to grant the variance would result in exceptional hardship to the applicant; and,

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- (ii) ~~(b)~~ determination that the variance will not result in increased flood heights, increased susceptibility to flooding or erosion, additional threats to public safety or infrastructure (including emergency services during flood events), or extraordinary public expense;
- (iii) ~~(c)~~ the variance will not increase the potential of materials being swept onto other lands or into the stream and causing damage to others; and,
- (iv) ~~(d)~~ the variance if granted will represent the minimum variance that will afford relief and will represent the least deviation possible from the bylaw and from the plan;

B. Notice to Applicant.

Upon request for a variance ~~the~~ administrative officer shall notify the applicant in writing over the signature of the zoning administrator or his/her designee that:

- (i) The issuance of a variance to construct a structure below the base flood elevation will result in increased flood insurance premium rates up to amounts as high as \$25 for \$100 of coverage ~~for flood insurance~~; and
- (ii) Such construction below the base flood elevation increases risks to life and property.

C. Annual Recording. As written.

11. Warning of Disclaimer of Liability *As written.*

Sec. 13.1.2 Definitions

~~**Flood Protection Area:** For purposes of this ordinance, the land subject to at least an one percent ($\geq 1\%$) chance of flooding in any given year (Base Flood/100 year flood). Further, with respect to flood and other hazard area regulation pursuant to this ordinance, the following terms shall have the following meanings:~~

- ~~(a) **Floodproofing** means any combination of structural and nonstructural additions, changes, or adjustments to properties and structures that substantially reduce or eliminate flood damage to any combination of real estate, improved real property, water or sanitary facilities, structures, and the contents of structures.~~

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- (b) ~~**Floodway** means the channel of a river or other watercourse and the adjacent land area that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot.~~
- (c) ~~**Hazard Area:** land subject to landslides, soil erosion, earthquakes, watersupply contamination, or other natural or human-made hazards as identified within a “local mitigation plan” in conformance with and approved pursuant to the provisions of 44 C.F.R. section 201.6. See Federal Flood Insurance Rate Maps.~~
- (d) ~~**New Construction:** construction of structures or filling commenced on or after the effective date of the adoption of a community’s flood hazard bylaws.~~
- (e) ~~**Substantial Improvement:** any repair, reconstruction, or improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure either before the improvement or repair is started or, if the structure has been damaged and is being restored, before the damage occurred. However, the term does not include either of the following:~~
- ~~1) Any project or improvement of a structure to comply with existing state or local health, sanitary, or safety code specifications that are solely necessary to assure safe living conditions.~~
 - ~~2) Any alteration of a structure listed on the National Register of Historic Places or a state inventory of historic places.~~

Special Flood Hazard Area (See Article 13, Part 2 for all Flood Hazard Definitions)

PART 2: FLOOD HAZARD DEFINITIONS

For the sole purpose of administering the Special Flood Hazard Area provisions of this ordinance pursuant to **Sec. 4.5.4**, the following terms and words are herein defined:

Base Flood As written.

Base Flood Elevation (BFE) As written.

Basement As written.

Cumulative Substantial Improvement means any reconstruction, rehabilitation, addition, alteration or other improvement of a structure, during any 5-year period, the cumulative 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

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~~the actual repair work performed. The term does not, however, include any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specification which have been identified by the state or local code enforcement official and which are the minimum necessary to ensure safe conditions.~~

Development means any human-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations, or storage of equipment or materials. (See definition in current ordinance.)

Existing manufactured home park or subdivision As written.

Expansion to an existing manufactured home park or subdivision As written.

Flood As written.

Flood Insurance Rate Map (FIRM) As written.

Flood Insurance Study As written.

Floodplain or flood-prone area As written.

Floodproofing means any combination of structural and nonstructural additions, changes, or adjustments to properties and structures that substantially reduce or eliminate flood damage to any combination of real estate, improved real property, water or sanitary facilities, structures, and the contents of the structures.

Floodway, Regulatory in the City of Burlington (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 more than one foot at any point.

Historic structure means 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 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: (i) by an approved

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state program as determined by the Secretary of the Interior or (ii) directly by the Secretary of the Interior in states without approved programs.

Lowest Floor As written.

Manufactured home As written.

Manufactured home park or subdivision As written.

New construction As written.

New manufactured home park or subdivision As written.

Recreational vehicle As written.

Special Flood Hazard Area is the land in the floodplain within a community subject to a 1 percent or greater chance of flooding in any given year. The area may be designated a Zone A on the Flood Hazard Boundary Map (FHBM). After detailed ratemaking has been completed in preparation for publication of the Flood Insurance Rate Map (FIRM), Zone A usually is refined into Zones AE.

The SFHA is composed of the floodway and the flood fringe. The floodway is the stream channel and that portion of the adjacent floodplain that must remain open to permit passage of the base flood without cumulatively increasing the water surface elevation more than one foot at any point.

Floodwaters generally are deepest and swiftest in the floodway, and anything in this area is in the greatest danger during a flood. The remainder of the floodplain is called the flood fringe, where water may be shallower and slower. The following figure illustrates the relationship between the floodway and flood fringe.

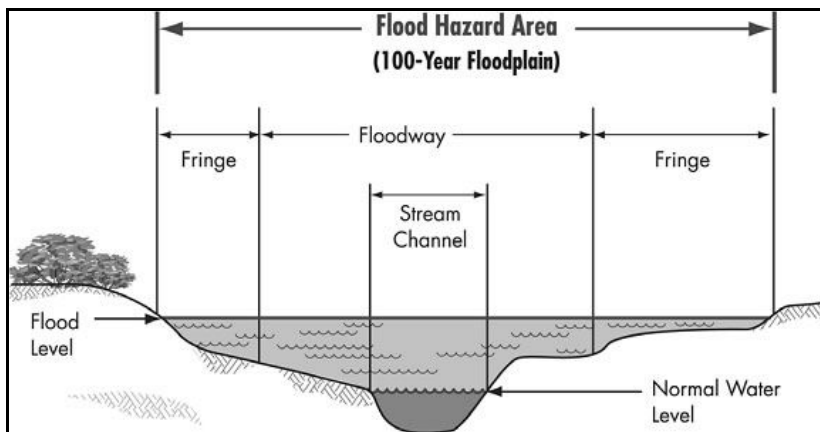


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Start of Construction As written.

Structure As written.

Substantial damage As written.

Substantial improvement means any reconstruction, rehabilitation, addition, or other improvement of a structure after the date of adoption of this bylaw, the cost of which, over three years, or over a the period of a common plan of development, cumulatively 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 either: (a) Any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specification which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions or (b) Any alteration of a “historic structure”, provided that the alteration will not preclude the structure’s continued designation as a “historic structure”.

Violation As written.

* Material stricken out deleted.

** Material underlined added.