TOWN OF CASTLETON

Flood Hazard Area Regulations

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FLOOD HAZARD AREA REGULATIONS

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TOWN OF CASTLETON
FLOOD HAZARD AREA REGULATIONS

I. Statutory Authorization

To effect the purposes of 10 V.S.A. Chapter 32, and in accordance with 24 V.S.A. § 4424, there is hereby established regulations for areas of special flood hazard in the Castleton, Vermont.

II. Statement of Purpose

It is the purpose of this regulation to:

A. Minimize and prevent the loss of life and property, the disruption of commerce, the impairment of the tax base, and the extraordinary public expenditures and demands on public services that result from flooding and other flood related hazards; and

B. Ensure that the design and construction of development in flood and other hazard areas are accomplished in a manner that minimizes or eliminates the potential for flood and loss or damage to life and property; and

C. Manage all flood hazard areas designated pursuant to 10 V.S.A. § 753; and

D. Make the state, municipalities, and individuals eligible for federal flood insurance and other federal disaster recovery and hazard mitigation funds as may be available.

III. Lands to Which These Regulations Apply

These regulations shall apply in the Special Flood Hazard Areas in and on the most current flood insurance studies and maps published by the Department of Homeland Security, Federal Emergency Management Agency, National Flood Insurance Program, as provided by the Secretary of the Agency of Natural Resources pursuant to 10 V.S.A. Chapter 32 § 753, which are hereby adopted by reference and declared to be part of these regulations.

IV. Determination of Base Flood Elevations and Floodway Limit

A. Base Flood Elevation (BFE) and Floodway Limits

Where available, base flood elevations and floodway limits provided by the National Flood Insurance Program and in the Flood Insurance Study and accompanying maps shall be used to administer and enforce these regulations.

In special flood hazard areas where base flood elevations *have not* been provided by the National Flood Insurance Program in the Flood Insurance Study and accompanying maps, it is the applicant's responsibility to develop the base flood elevation at the site. The applicant shall use data provided by FEMA or available from State or Federal agencies.

B. Special Flood Hazard Areas where Floodways have not been determined:

1. In Zones A, AE, AH, and A1 – A30 where floodways have not been determined, development shall not be permitted unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated encroachment, will not increase the water surface elevation of the base flood more than 1.00 foot at any point within the community. The demonstration must be supported by technical data that conforms to standard hydraulic engineering principles and certified by a registered professional engineer.
2. in Zone A, where neither base flood elevations nor floodways have been determined development shall not be permitted unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated encroachment, will not increase the water surface elevation of the base flood more than 1.00 foot at any point within the community. The demonstration must be supported by technical data that conforms to standard hydraulic engineering principles and certified by a registered professional engineer.

C. Disputes in Areas and Elevations

The information presented on any maps, or contained in any studies, adopted by reference, is presumed accurate and shall be used until shown to be otherwise. Rulings by FEMA shall be considered proof for the purposes of this bylaw.

If uncertainty exists with respect to the horizontal boundaries on the map, the location of the boundary shall first be determined by the Zoning Administrator (AO). If the Applicant disagrees with the Zoning Administrators decision, it can be appealed to the Development Review

Board where the applicant shall have the burden of proof. A Letter of Map Amendment or Letter of Map Revision from FEMA shall constitute proof.

V. Development Permit and Conditional Use Approval

A. Permit Required

A permit is required from the Zoning Administrator for all proposed fill, construction or other development, including new or substantially improved structures, the placement of manufactured homes or recreational vehicles, and storage of chemicals, explosives, flammable liquids, or other hazardous or toxic materials, in all areas covered by this bylaw. Development needing conditional use approval, nonconforming use approval or a variance must have such.

B. Permitted Development

The following activities outside the floodway only require an administrative permit from the Zoning Administrator:

1. non-substantial improvements to existing structures that do not involve fill and do not decrease structure setbacks from any stream;
2. at-grade parking areas that meet the requirements in Article VI;
3. small accessory structures such as fences, sheds, or utilities that meet the requirements in Article VI; or
4. utilities that do not involve fill and that meet the requirements in Article VI and FEMA Guidance 348 *Protecting Building Utilities From Flood Damage*

C. Conditional Use Approval

Conditional use approval by the Development Review Board, prior to the issuance of a permit by the Zoning Administrator, is required for:

1. Any development that takes place in the underlying zoning districts that is not excluded by Section V. B. and D including new or substantial improvement, elevation, or flood proofing of existing structures,
2. improvements to existing roads or drainage,
3. grading, excavation, or the creation of a pond,
4. bridges, culverts, public utilities, stabilization projects, or public projects which are functionally dependent on stream access or stream crossing,

In granting conditional use approval, the Board shall use the standards for development set out below in Section VI.

D. Exempted Activities

The following are exempt from regulation under these flood hazard area regulations.

1. the removal of a structure or building in whole or in part;
2. maintenance of existing roads and drainage.
3. silvicultural (forestry) activities conducted in accordance with Vermont Department of Forest and Parks Acceptable Management Practices; and
4. agricultural activities conducted in accordance with Vermont Department of Agriculture Accepted Agricultural Practices (AAP). In Section 4.07 the AAP states:
    a. Manure, fertilizer, pesticide storage structures, and farm structures shall not be constructed within a floodway area as presented on National Flood Insurance Maps on file with Town Clerks or within a Fluvial Erosion Hazard Zone as designated by municipal ordinance. Such structures may be constructed outside this area yet within the 100-year floodplain when adequately protected from inundation and floodwater damage. Fences through which floodwater may flow are not structures which represent an encroachment in a floodway area.

    b. All manure, fertilizer, and pesticide storage structures constructed within a floodplain must conform to National Flood Insurance Program standards.

    c. Prior to construction of farm structures, the farmer must notify the zoning administrator or the town clerk in writing of the proposed construction activity. The notification must contain a sketch of the proposed structure including the setbacks from adjoining property lines and road rights-of-way.

    d. Local setbacks or no build areas within Fluvial Erosion Hazard Zones established by the municipality shall be maintained unless upon written petition of the farmer the Secretary has approved other reasonable setbacks for the specific farm structure being constructed or maintained.

    e. In addition to the provisions of 4.07 (a) and (b); new structures that are not additions to existing farm structures associated with farm operations shall be constructed so that a minimum distance of 50 feet is maintained between the top of the bank of the

adjoining waters and the farm structure. Such structures do not include those for irrigation, drainage or fencing.

f. All waste storage facilities constructed or expanded after July 1, 2006 shall be designed and constructed according to USDA Natural Resource Conservation Service standards and specifications or an equivalent standard certified by a professional engineer licensed in the State of Vermont.

g. In addition to the provisions of 4.07 (a) and (b); new structures that are not additions to existing farm structures associated with farm operations shall be constructed so that a minimum distance of 50 feet is maintained between the top of the bank of the adjoining waters and the farm structure. Such structures do not include those for irrigation, drainage or fencing.

VI. Development Standards

A. Floodway Areas

1. Development or other encroachments within the regulatory floodway, as determined by Section VI.A, is prohibited unless it has been demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practice by a registered professional engineer certifying that the proposed development will result in no increase in flood levels during the occurrence of the base flood.

2. Junkyards, on-site wastewater disposal systems, and storage facilities for floatable materials, chemicals, explosives, flammable liquids, or other hazardous or toxic materials, are prohibited within the floodway.

B. All Special Flood Hazard Areas (within mapped Floodway Areas, the following Section B. provisions are additive to the Section A provisions above).

1. All Development - All development shall be reasonably safe from flooding and:
   (a) Designed (or modified) and adequately anchored to prevent flotation, collapse, or lateral movement of the structure during the occurrence of the base flood,

   (b) constructed with materials resistant to flood damage,

(c) constructed by methods and practices that minimize flood damage, and

(d) 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.

2. Residential Development:

(a) New construction and existing buildings to be substantially improved that are located in Zones A, A1-30, AE, and AH shall have the lowest floor, including basement, elevated to or above the base flood elevation.

(b) Manufactured homes to be placed and existing manufactured homes to be substantially improved that are:

(i) located in a new manufactured home park or subdivision, outside of a manufactured home park or subdivision, in an expansion to an existing manufactured home park or subdivision, or in a manufactured home park or subdivision which has incurred substantial damage from a flood shall be elevated on a permanent foundation such that the lowest floor of the manufactured home is elevated to no less than one foot 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.

(ii) located in an existing manufactured home park, where elevating a replacement home to or above base flood elevation is not possible, the lowest floor shall be supported by reinforced piers or other foundation elements of at least equivalent strength that are no less than 48 inches in height above grade and be securely anchored to an adequately anchored system to resist floatation, collapse, and lateral movement.

(c) Residential construction located within Zones A, AH and AO shall have adequate drainage paths around structures on slopes, to guide floodwater around and away from the proposed structures

3. Non-residential Development:

(a) New construction located in Zones A, A1-30, AE, and AH shall have the lowest floor, including basement, elevated to or above the base flood elevation.

(b) Existing buildings to be substantially improved located in Zones A, A1-30, AE, and AH shall have the lowest floor, including basement, elevated to or above the base flood elevation or together with attendant utility and sanitary facilities be designed so that below the base flood elevation the structure is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy.

(c) A permit for a building proposed to be flood proofed shall not be issued until a registered professional engineer or architect has reviewed the structural design, specifications and plans, and has certified that the design and proposed methods of construction are in accordance with accepted standards of practice for meeting the provisions of this subsection.

(d) Non-residential construction located within Zones AH and AO shall have adequate drainage paths around structures on slopes, to guide floodwater around and away from the proposed structures.

4. Subdivisions:

(a) New subdivision proposals and other proposed development (including proposals for manufactured home parks and subdivisions) that are greater than 50 lots or 5 acres, whichever is the lesser, shall include base flood elevation data.

(b) Subdivisions (including manufactured home parks) shall be designed to assure:

(i) such proposals minimize flood damage within the flood-prone area,

(ii) public utilities and facilities, such as sewer, gas, electrical, and water systems are located and constructed to minimize or eliminate flood damage, and

(iii) adequate drainage is provided to reduce exposure to flood hazards.

5. Enclosed Areas Below the Lowest Floor:

(a) Enclosed areas below the lowest floor which are subject to flooding shall be used solely for parking of vehicles, building access, or storage.

(b) New construction and existing buildings to be substantially improved with fully enclosed areas below the lowest floor that are

subject to flooding shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters.

(c) Designs for meeting this requirement must either be certified by a registered professional engineer or architect or meet or exceed the following minimum criteria: A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject 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.

6. Recreational Vehicles: Recreational Vehicles placed on sites with special flood hazard areas shall either:

(a) be on the site for fewer than 180 consecutive days,

(b) be fully licensed and ready for highway use, or

(c) be permitted in accordance with the elevation and anchoring requirements for "manufactured homes" in section B.2. (b).

7. Accessory Structures: A small accessory building that represents a minimal investment need not be elevated to the base flood elevation provided the structure meets the following requirements:

(a) The structure must only be used for parking or storage,

(b) The structure must have the required openings to allow floodwaters in and out,

(c) The structure must be constructed using flood resistant materials below the Base Flood Elevation,

(d) The structure must be adequately anchored to resist flotation, collapse, and lateral movement, and

(e) All building utility equipment including electrical and heating must be elevated or flood proofed.

8. Water Supply Systems: New and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the systems.

9. Sanitary Sewage Systems: New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters.

10. On-Site Waste Disposal Systems: On-site wastewater disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

11. Watercourse Carrying Capacity: The flood carrying capacity within any altered or relocated portion of a watercourse shall be maintained.

VII. Variances to the Development Standards

Variances to the above standards may be granted in writing by the Development Review Board only in accordance with 24 V.S.A. § 4469 and 44 CFR Section 60.6, and after a hearing noticed in accordance with 24 VSA 117, Section 4464(a).

Any variance issued will inform the applicant that the issuance of a variance to construct a structure below the base flood elevation increases risk to life and property and will result in increased flood insurance premiums up to amounts as high as $25 for $100 of coverage. Such notification shall be maintained with a record of all variance actions.

VIII. Nonconforming Structure(s) in Areas of Special Flood Hazard

The Development Review Board may, after public notice and hearing, approve the repair, relocation, replacement, or enlargement of a non conforming structure within a regulated flood hazard area, subject to compliance with the development standards in VI above and the following:

A. The Board finds that the repair, relocation, or enlargement of such non conforming structure is required for the continued economically feasible operation of a non residential enterprise; and

B. The Board finds that the repair, relocation, or enlargement of a non conforming residential or non residential structure will not increase flood levels in the regulatory floodway, threaten the health, safety and welfare of the public or other property owners; and

C. The permit, so granted, shall state that the repaired, relocated, or

enlarged nonconforming structure is located in a regulated flood hazard area, does not conform to the bylaws pertaining thereto, may not be eligible for any flood insurance which may pertain to regulated flood hazard areas, and will be maintained at the risk of the owner; and

D. A copy of such permit shall be affixed to the copy of the deed of the concerned property on file in the municipal clerk's office.

IX. Administration

All proposed development shall be reviewed by the Zoning Administrator or the Development Review Board to assure that all necessary permits have been received from those government agencies from which approval is required by Federal, State or Municipal law.

A. Application Requirements

All applications for development in the Flood Hazard Overlay District shall include:

1. the name and contact information for the owner of the property, including any agents authorized to act on their behalf;

2. a thorough description of the proposed development;

3. general location map including the address of the property, tax parcel ID, relative locations of the existing development and the nearest public road;

4. where applicable locate the proposed development, any water bodies, special flood hazard areas, floodways, the shortest horizontal distance from the proposed development to the center line of stream, shortest horizontal distance to top of bank of any stream, any existing or proposed drainage, any proposed fill, and pre and post development grades, and the elevation of the proposed lowest floor, as referenced to the same vertical datum as the elevation on the current special flood hazard maps;

A Vermont Agency of Natural Resources Project Review Sheet for the proposal. 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 permit application. The identified permits, or letters indicating that

such permits are not required, shall be submitted to the AO and attached to the permit application before work can begin;

5. two copies of the application,

6. the appropriate fee and,

7. a Permit Review Sheet from the Agency of Natural Resources indicating which permits, if any, may also be required.

For applicants seeking conditional use approval, non conforming use approval, or a variance, the following also need to be provided:

1. a list of abutters names and mailing addresses;
2. a statement of purpose and need for the proposed development;
3. a description of the alternatives considered to the proposed development, including alternate locations on site, especially outside of the hazard area;
4. elevations of any proposed development;
5. such pertinent information as identified in the regulations or deemed necessary by the Development Review Board for determining the suitability of the proposed development for the site;
6. copies of the application sufficient for the file, the Development Review Board members, the State National Flood Insurance Program Coordinator, and additional parties such as the VT DEC Stream Alteration Engineer and adjacent communities if affected under SectionVIII A.; and,
7. any additional fees required.

B. Referrals

Upon receipt of a completed application the Zoning Administrator shall submit a copy of the application and supporting information to the State National Flood Insurance Program (NFIP) Coordinator at the Vermont Agency of Natural Resources, Department of Environmental Conservation, River Management Program 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.

If the applicant is seeking a permit for the alteration or relocation of a watercourse, copies of the application shall also be submitted to the adjacent communities, and the Stream Alteration Engineer at the Vermont Agency of Natural Resources, Department of Environmental Conservation, River Management Section, and the Army Corps of

Engineers. Copies of such notice shall be provided to the State National Flood Insurance Program (NFIP) Coordinator at the Vermont Agency of Natural Resources, Department of Environmental Conservation. A permit may be issued only following receipt of comments from the Vermont Agency of Natural Resources, or the expiration of 30 days from the date the application was mailed to the Vermont Agency of Natural Resources, whichever is sooner.

C. Records

1. Within three days following the issuance of a permit, the Zoning Administrator shall:

   a) deliver a copy of the permit and any accompanying conditional approval to the Listers of the municipality; and

   b) post a copy of the permit in at least one public place in the municipality until the expiration of 15 days from the date of issuance of the permit.

2. Within 30 days after a municipal land use permit has been issued or within 30 days of the issuance of any notice of violation, the Zoning Administrator shall:

   a) deliver the original or a legible copy of the permit, or notice of permit, and any approvals to the town clerk for recording in the land records as provided in 24 VSA, § 1154(a);

   b) file a copy of the permit and any approvals in the Town office in a location where all municipal land use permits shall be kept; and,
   c) the Zoning Administrator may charge the applicant for the cost of the recording fees as required by law.

3. The Zoning Administrator shall properly file and maintain a record of:
   a) all permits issued in areas covered by this bylaw;

   b) the as-built elevation (consistent with the datum of the elevation on the current Special Flood Hazard Maps for the community) of the lowest floor, including basement, of all new or substantially improved buildings in areas of special flood hazard;

   c) the as-built elevation (consistent with the datum of the elevation on the current Special Flood Hazard Maps for the community) to which buildings have been floodproofed in areas of special flood hazard;

d) all floodproofing certifications required under this regulation; and,

e) All variances, notices of alleged violation, and conditional use approvals, including justification for their issuance.

D. Decisions

Conditional use approvals, non-conforming use approvals, and variances shall assure that all necessary permits must be also received from those government agencies from which approval is required by Federal, State or Municipal law prior to the issuance of a permit.

The Development Review Board shall consider comments from the NFIP Coordinator at DEC.

X. Enforcement and Penalties

The Flood Hazard Area Regulations shall be enforced in accordance with the provisions of Section 1106 of the Town of Castleton Zoning Regulations. In addition, upon determination that a violation exists, the Zoning Administrator shall mail a copy of the notice of violation to the State NFIP Coordinator. The notice shall state that:

If the violation is not remedied within 7 days, or after all appeals have been resolved, the Zoning Administrator shall submit a declaration to the Administrator of the National Flood Insurance Program requesting a denial of flood insurance to the violator. The declaration shall consist of: (a) the name of the property owner and address or legal description of the property sufficient to confirm its identity or location, (b) a clear and unequivocal declaration that the property is in violation of a cited State or local law, regulation, or ordinance, (c) a clear statement that the Zoning Administrator making the declaration has authority to do so and a citation to that authority, (d) evidence that the property owner has been provided notice of the violation and the prospective denial of insurance, and (e) a clear statement that the declaration is being submitted pursuant to Section 1316 of the National Flood Insurance Act of 1968, as amended.

Violations of the AAP are subject to enforcement under applicable Vermont law including, but not necessarily limited to, the provisions of 6 V.S.A. Section 4812. Such violations in the special flood hazard area shall be immediately reported to the Secretary of Agriculture for enforcement, and a copy of the report shall be sent to the VT DEC NFIP Coordinator.

XI. Other Provisions

A. Warning of Disclaimer of Liability

This regulation does not imply that land outside of the areas of special flood hazard or land use permitted within such districts will be free from flooding or flood damages. This regulation shall not create liability on the part of the Town of Castleton_ or any town official or employee thereof for any flood damages that result from reliance on this regulation or any administrative decision lawfully made thereunder.

B. Validity and Severability

If any portion of this regulation is held unconstitutional or invalid by a competent court, the remainder of this regulation shall not be affected.

C. Precedence of Regulation

The provisions of this regulation shall not in any way impair or remove the necessity of compliance with any other applicable regulations. Where this regulation imposes a greater restriction, the provisions of this regulation shall take precedence.

XII. Definitions for Flood Hazard Zoning Purposes

A Zone means that portion of the SFHA subject to a one percent chance of being equaled or exceeded by flooding in any given year. In the A Zone the base floodplain is mapped by approximate methods, i.e. BFEs are not determined. This is often called the unnumbered A Zone or approximate A Zone.

Administrative Officer means the person appointed by the Selectboard to administer and implement the provisions of these regulations. In the Town of Castleton, the Administrative Officer is the Zoning Administrator.

AH zone is an area of 100-year shallow flooding where depths are between 1 and 3 feet (usually shallow ponding), base flood elevations are shown.

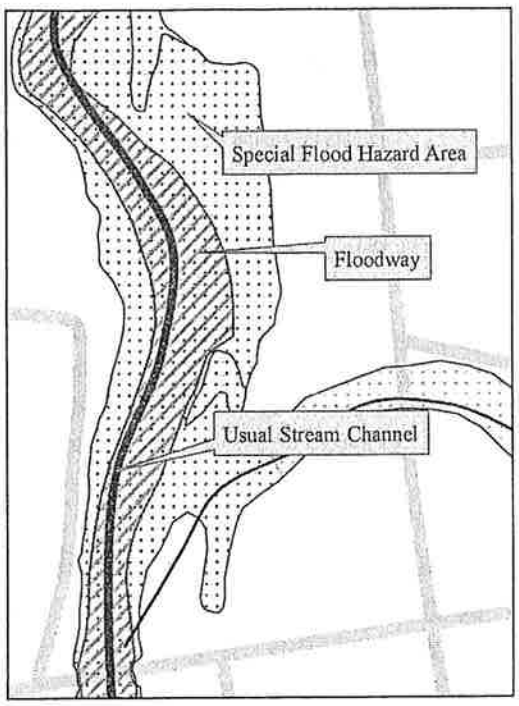
Accessory Structure means a structure which is: 1) detached from and clearly incidental and subordinate to the principal use of or structure on a lot, 2) located on the same lot as the principal structure or use, and 3) clearly and customarily related to the principal structure or use. For residential uses these include, but may not be limited to garages, garden and tool sheds, and playhouses.

Appropriate Municipal Panel (AMP) means a planning commission performing development review, a board of adjustment, a development review board, or a legislative body performing development review.

Area of Special Flood Hazard is synonymous in meaning with the phrase "special flood hazard area" for the purposes of these regulations.

Base Flood means the flood having a one percent chance of being equaled or exceeded in any given year (commonly referred to as the 100-year flood).

Base Flood Elevation (BFE) the height of the base flood, usually in feet, in relation to the National Geodetic Vertical Datum of 1929, the North American Vertical Datum of 1988, or other datum referenced in the Flood Insurance Study report, or average depth of the base flood, usually in feet, above the ground surface.



Basement means any area of the building having its floor elevation (below ground level) on all sides.

BFE see Base Flood Elevation

Channel means an area that contains continuously or periodic flowing water that is confined by banks and a streambed.

Channel width (or bankfull width) is the width of a stream channel when flowing at a bankfull discharge. The bankfull discharge is the flow of water that first overtops the natural banks. This flow occurs, on average, about once every 1 to 2 years.

Common plan of development is where a structure will be refurbished over a period of time. Such work might be planned unit by unit.

Critical Facilities - include police stations, fire and rescue facilities, hospitals, shelters, schools, nursing homes, water supply and waste treatment facilities, and other structures the community identifies as essential to the health and welfare of the population and that are especially important following a disaster. For example, the type and location of a business may raise its status to a Critical Facility, such as a grocery or gas station that survive a flood and now are the only points for food and gas.

Development means any man-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.

Existing manufactured home park or subdivision means a manufactured home park or 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 before the effective date of the *initial* floodplain management regulations adopted by a community.

Expansion to an existing manufactured home park or subdivision means 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).

Fill means any placed material that changes the natural grade, increases the elevation, or diminishes the flood storage capacity at the site.

FIRM see Flood Insurance Rate Map

Flood means (a) a general and temporary condition of partial or complete inundation of normally dry land areas from: the overflow of inland or tidal waters; the unusual and rapid accumulation or runoff of surface waters from any source; and mudslides which are proximately caused by flooding and are akin to a river of liquid and flowing mud on the surfaces of normally dry land areas, as when earth is carried by a current of water and deposited along the path of the current. (b) The collapse or subsidence of land along the shore of a lake or other body of water as a result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually high water level in a natural body of water, accompanied by a severe storm, or by an unanticipated force of nature, such as flash flood or abnormal tidal surge, or by some similarly unusual and unforeseeable event which results in flooding.

Flood Insurance Rate Map (FIRM) means an official map of a community, on which the Federal Insurance Administrator has delineated both the special flood hazard areas and the risk premium zones applicable to the community.

Flood Insurance Study (generic) means an examination, evaluation and determination of flood hazards and, if appropriate, corresponding water surface

elevations or an examination, evaluation and determination of mudslide (i.e., mudflow) and /or flood related erosion hazards.

Flood Insurance Study (FIS) is the official hydraulic & hydrologic report provided by FEMA. The report contains flood profiles, as well as the FIRM, FHBM (where applicable) and the water surface elevation of the base flood.

Floodplain or flood-prone area means any land area susceptible to being inundated by water from any source (see definition of "flood").

Flood proofing means 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 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 1.0 foot at any point. Towns with established base flood elevations (BFEs) on Flood Insurance Rate Maps please note that the extent of FEMA floodways may be shown on a separate series of panels.

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.

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

Interested person means any one of the following:
(1) A person owning title to property, or a municipality or solid waste management district empowered to condemn it or an interest in it, affected by a bylaw, who alleges that the bylaw imposes on the property unreasonable or

inappropriate restrictions of present or potential use under the particular circumstances of the case.
(2) The municipality that has a plan or a bylaw at issue in an appeal brought under this chapter or any municipality that adjoins that municipality.
(3) A person owning or occupying property in the immediate neighborhood of a property that is the subject of any decision or act taken under this chapter, who can demonstrate a physical or environmental impact on the person's interest under the criteria reviewed, and who alleges that the decision or act, if confirmed, will not be in accord with the policies, purposes, or terms of the plan or bylaw of that municipality.
(4) Any ten persons who may be any combination of voters or real property owners within a municipality listed in subdivision (2) of this subsection above who, by signed petition to the appropriate municipal panel of a municipality, the plan or a bylaw of which is at issue in any appeal brought under this title, allege that any relief requested by a person under this title, if granted, will not be in accord with the policies, purposes, or terms of the plan or bylaw of that municipality. This petition to the appropriate municipal panel must designate one person to serve as the representative of the petitioners regarding all matters related to the appeal.
(5) Any department and administrative subdivision of this state owning property or any interest in property within a municipality listed in subdivision (2) of this subsection, and the agency of commerce and community development of this state.

Legislative body means the Selectboard in the case of a town, the trustees in the case of an incorporated village, and the mayor, alderpersons, and city council members in the case of a city, and the supervisor in the case of an unorganized town or gore.

Lowest floor means the lowest floor of the lowest enclosed area, including basement, except 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 44 CFR 60.3.

Manufactured home means a structure, transportable in one 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 subdivision means a parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.

Minor improvement means any repairs, reconstruction, or improvement of a structure (other than customary maintenance), the cost of which is less than fifty (50) percent of the market value of the existing structure.

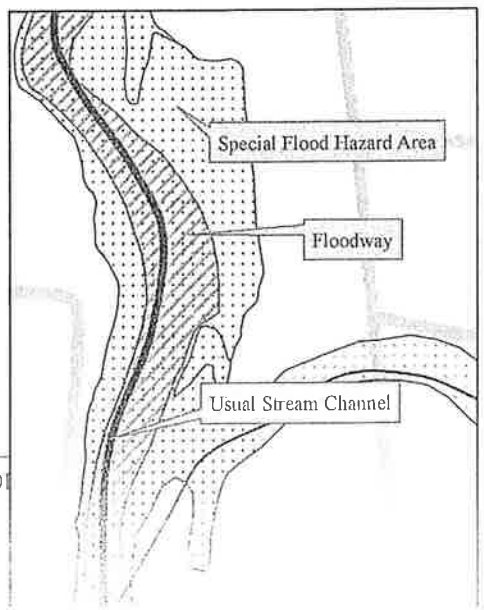
New construction means, for the purposes of determining insurance rates, structures, including manufactured homes, for which the "start of construction" commenced on or after the effective date of an initial FIRM or after December 31, 1974, whichever is later, and includes any subsequent improvements to such structures. For regulation under this bylaw, *new construction* means structures for which the *start of construction* commenced on or after the effective date of the floodplain management regulation adopted by a community and includes any subsequent improvements to such structures.

New manufactured home park or subdivision means a manufactured home park or 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 the floodplain management regulations adopted by a community.

Non-residential Includes, but is not limited to: small business concerns, churches, schools, nursing homes, farm buildings (including grain bins and silos), pool houses, clubhouses, recreational buildings, government buildings, mercantile structures, agricultural and industrial structures, and warehouses.

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 a temporary living quarters for recreational, camping, travel, or seasonal use.

Regulatory floodway means the floodway identified in and on the most current flood insurance studies and maps published by the Department of Homeland Security, Federal Emergency Management Agency, and the channel of the 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 1.00 foot at any point.



Special Flood Hazard Area (SFHA) is the land in the floodplain within a community subject to a 1 percent or greater chance of flooding in any given year. For purposes of these regulations, the term "area of special

flood hazard" "is synonymous in meaning with the phrase "special flood hazard area". Maps of this area are available for viewing in the town clerk's office or acquired online from the FEMA Map Service Center. The Special Flood Hazard Area may be designated a Zone A on the Flood Hazard Boundary Map (FHBM). Zone A is the flood insurance rate zone that corresponds to the 100-year floodplains that are determined in the Flood Insurance Study (FIS) by approximate methods. Because detailed hydraulic analyses are not performed for such areas, no BFEs or depths are shown within this zone. After detailed ratemaking has been completed in preparation for publication of the Flood Insurance Rate Map (FIRM), Zone A usually is refined into Zones A, AO, AH, A1-30, or AE. Zones AE and A1-A30 are the flood insurance rate zones that correspond to the 100-year floodplains that are determined in the FIS by detailed methods. In most instances, BFEs derived from the detailed hydraulic analyses are shown at selected intervals within this zone. Zone AH is the flood insurance rate zone that corresponds to the areas of 100-year shallow flooding with a constant water-surface elevation (usually areas of ponding) where average depths are between 1 and 3 feet. The BFEs derived from the detailed hydraulic analyses are shown at selected intervals within this zone. The extent of floodways may be shown on separate map panels in communities that have established BFEs.

Start of construction includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition placement, or other improvement was within 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, footing, piers, or foundations or the erection 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, regardless whether that alteration affects the external dimensions of the building.

Structure means, for regulatory purposes under this bylaw, a walled and roofed building, as well as a manufactured home, and any related built systems, including a gas or liquid storage tanks. *Structure*, for insurance purposes, means: (a) A building with two or more outside rigid walls and a fully secured roof, that is affixed to a permanent site; (b) A manufactured home ("a manufactured home," also known as a mobile home, is a structure: built on a

permanent chassis, transported to its site in one or more sections, and affixed to a permanent foundation); or (c) 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 a recreational vehicle or a park trailer or other similar vehicle, except as described in (c) of this definition, or a gas or liquid storage tank.

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

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 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". For the purposes of determining "substantial improvement" value and exceptions in (a) only and no other purpose, the Zoning Administrator is "the local code enforcement official".

Violation means the failure of a structure or other development to be fully compliant with this bylaw. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in 44 CFR 60.3 is presumed to be in violation until such time as that documentation is provided.

Walkout-on-grade basement means a basement whose floor is at ground level on at least one side of the house, usually with a door on that side. This is not considered a "basement" as defined by these regulations.

Adopted by the Select Board of the Town of Castleton on June 23, 2008
Effective: July 14, 2008

Town of Castleton Vermont
Flood Analysis

ABOUT THIS MAP

This map shows flood plain data from the town's new digital flood insurance rate maps. Blue areas did not change. They were in the flood plain in the older version of the FIRM data and remain in the newer version of the DFIRM. Red areas have dropped from the flood plain. They existed in the older FIRM data but are not present in the newer DFIRM. Areas depicted in Yellow have been added to the flood plain. They were not found in the older FIRM data, but were added to the newer DFIRM. This map also shows the number of structures in each category. This map is not a legal document.

Legend

- Structures added to flood plain
- Structures remained in flood plain
- Structures dropped from flood plain
- Rivers and Streams
- Lakes and Ponds
- Castleton Town parcel boundaries
- Areas added to flood plain
- Areas dropped from flood plain
- Areas remained the same

The number in parentheses is the number of structures in that category.

DIGITAL FLOOD INSURANCE RATE MAPS (DFIRMs)

The Federal Emergency Management Agency, (FEMA) in cooperation with the State Of Vermont, has compiled new Digital Flood Insurance Rate Maps (DFIRMs) for Rutland County The DFIRM data is preliminary and is still under review by local officials. Rutland County had Its public informational meeting on July 24, 2007, municipalities have ninety days to revise their maps as necessary. The new DFIRM format is GIS based and uses orthophotography as a bas map. Also, map updates are now being created on a county-wide basis, not a town-wide basis. The existing Flood Insurance Rate Maps (FIRM), of various dates and scale, were digitized by RRPC. This map is for planning purposes only. It does not necessarily identify all areas subject t flooding, particularly those from small local sources, lakes and ponds.
For more information, go to: http://www.vtwaterquality.org/rivers/htm/rv_floodhazard.htm, or visit FEMA's map modernization web site: http://www.fema.gov/plan/prevent/fhm/mm_main.htm.

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MAP UPDATED May 6, 2008

MAP INFORMATION

This map is designed to help municipalities review current FIRM data and new DFIRM data. All efforts have been made to use the most current available data at the time the map was produced. Parcel data was developed by Cartographic Associates, Inc, 2006. Surface water data is from the Vermont Center for Geographic Information, Inc, Vermont Hydrography Data set. The VHD data is a subset of the National Hydrography Data set. Orthophotography is from the National Agricultural Imagery Program (NAIP), 2006. Structure data points, developed by the State of VT E911 board, usually lie at the front of a structure, therefore: it is possible that a structure's point may lie outside of the floodplain, but the majority of the structure could lie within the flood plain. So, all structures and numbers derived from them are approximate.

0 0.5 1 2 3 4 Kilometers

0 0.5 1 2 Miles