Canaan Flood Plain Regulations

The following regulations shall apply to all lands designated as special flood hazard areas by the Federal Emergency Management Agency in its ''Flood Insurance Study for the Town of Canaan, N.H.'' together with the associated Flood Insurance Rate Maps and Flood Boundary and Flood way maps of the Town of Canaan dated March'-12, 1988 which are declared to be a part of this Ordinance.

Item I. Definition of Terms

''Area of Shallow Flooding'' means a designated AO of AH zone on a community's Flood Insurance Rate Map (FIRM) with a one percent or greater annual chance of flooding to an average depth of one to three feet where a clearly defined channel does not exist, where the path of flooding is unpredictable and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow.

''Area of Special Flood Hazard'' is the land in the flood plain within a community subject to a one percent or greater chance of flooding in any given year. The area may be designated as Zone A on the GHBM. After detailed rate making has been completed in preparation for publication of the FIRM, Zone A usually is refined into Zones A, AO, AH, A1-30, AE or A99.

''BaseFlood'' means the flood having a one percent chance of being equaled or exceeded in any given year.

''Basement'' means any area of the building having its floor sub-grade (below ground level) on all sides.

"Building"- see "Structure".

"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.

''Flood Boundary and Floodway Map'' (FLOODWAY) is an official map of the community, on which the Federal Emergency Management Agency has delineated the "Regulatory Flood way". This map should not be used to determine the correct flood hazard zone or base flood elevation; the Flood Insurance Rate Map (FIRM) will be used to make determinations of flood hazard zones and base flood elevations.

"Flood Hazard Boundary Map'' (FHBM) means an official map of a community, issued by the Federal Emergency Management Agency, where the boundaries of the flood, mudslide (i.e., mudflow) related erosion areas having special hazards have been designated as Zone A.

''Flood Insurance Rate Map'' (FIR.11) means an official map of a community, on which the Federal Emergency Management Agency has delineated both the special hazard areas and the risk premium zones applicable to the community.

"Flood Insurance Study" -see "Flood Elevation Study".

"Flood Plain" or "Flood-Prone Area" means any land areas susceptible to being inundated by water from any source.

"Flood Proofing" means any combination of structural and non-structural additions, changes, or adjustment to structures which reduce or eliminate flood damage to real estate or improved real property, water and sanitary structures and their contents.

"Floodway" -see "Regulatory Floodway"

''Highest Adjacent Grade'' means the highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.

"Lowest Floor'' means the lowest floor of the lowest enclosed area (including basement). 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 the ordinance.

"Mean Sea Level" means, for purposes of the National Flood Insurance Program, the National Geodetic Vertical Datum (NGVD) of 1929 or other datum, to which base flood elevations shown on a community's Flood Insurance Rate map are referenced.

''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 connected to required utilities. For flood plain management purposes the term

''Manufactured Home'' also includes park trailers, travel trailers, and other similar vehicles placed on a site for greater than 180 consecutive days. For insurance purposes the term "manufactured home" does not include park trailers, travel trailers, and other similar vehicles.

'' 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.

'' 100- Year Flood'' -see ''Base Flood''.

''Regulatory Flood way'' 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. These areas are designated as floodways on the Flood Boundary and Floodway Maps.

"Riverine" means relating to, formed by, or resembling a river (including tributaries), stream, brook, etc.

"Special Flood Hazard Area" means an area having special flood, mudslide (i.e., mudflow) and/or flood-related erosion hazards, and shown on an FHBM or FIRM as Zone A, AO, A1-30, AE, A99, and AH. (See Area of Special Flood Hazard.)

"Structure" means for floodplain management purposes a walled and roofed building, including a gas or liquid storage tank that is principally above ground, as well as a manufactured home.

''Start of Construction'' includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, 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, footings,

piers, or foundations or the erection of temporary forms; nor docs 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.

''Substantial Improvement'' means any combination of repairs, reconstruction, alteration, or improvements to a structure in which the cumulative cost equals or exceeds fifty percent of the market value of the structure. The market value of the structure should be (1) the appraised value of the structure prior to the start of the initial repair or improvement, or (2) in the case of damage, the value of the structure prior to the damage occurring. For the purposes of this definition, "substantial improvement" is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration affects the external dimensions of the structure. The term does not, however, include any project for improvement of a structure required to comply with existing health, sanitary, or safety code specifications which are solely necessary to assure safe living conditions or any alteration of a structure listed on the National Register of Historic Places.

''Water Surface Elevation'' means the height, in relation to the National Geodetic Vertical Datum (NGVD) of 1929, (or other datum, where specified) of flood of various magnitudes and frequencies in the flood plains of coastal or riverine areas.

Item II.

All proposed development in any special flood hazard areas shall require a permit.

Item III.

The Building Inspector shall review all building permit applications for new construction or substantial improvements to determine whether proposed building sites will be reasonably safe from flooding. If a proposed building site is in a flood-prone area, all new construction and substantial improvements shall (i) be designed (or modified) and adequately anchored to prevent flotation, collapse, or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effect of buoyancy, (ii) be constructed with materials resistant to flood damage, (iii) be constructed by methods and practices that minimize flood damages, and (iv) be 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.

Item IV.

Where new and replacement water and sewer systems (including on-site systems) are proposed in flood-prone areas the applicant shall provide the Building Inspector with assurance that new and replacement sanitary sewage systems will be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters, and on-site waste disposal systems will be located to avoid impairment to them or contamination from them during periods of flooding.

Item V.

The Building Inspector shall maintain for public inspection, and furnish upon request, any certification of flood-proofing and the as-built elevation (in relation to mean sea level) of the lowest floor (including basement) of all new or substantially improved structures, and include whether or not such structures contain a basement. If the structure has been f1oodproofed, the as-built elevation (in relation to mean sea level) to which the structure was flood-proofed sic. This information must be furnished by the applicant.

Item VI.

The Building Inspector shall review proposed developments to assure that all necessary permits have been received from those governmental agencies from which approval is required by Federal or State Law, including Section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334. It shall be the responsibility of the applicant to certify these assurances to the Building Inspector.

Item VII.

In riverine situations, prior to the alteration or relocation of a watercourse, the applicant for such authorization shall notify the Wetlands Board of the New Hampshire Environmental Services Department and submit copies of such notification to the Building Inspector. Further, the applicant shall be required to submit copies of said notification to those adjacent communities as determined by the Building Inspector.

Within the altered or relocated portion of any watercourse, the applicant shall submit to the Building Inspector certification provided by a registered professional engineer assuring that the flood carrying capacity of the watercourse has been maintained.

Along watercourses that have a designated Regulatory Floodway no encroachments, including fill, new construction, substantial improvements, and other development are allowed within the designated Regulatory Floodway that would result in any increase of Hood levels within the community during the base flood discharge. In Zone A the Building Inspector shall obtain, review, and reasonably utilize any flood way data available from a Federal, State, or other source as criteria for requiring that development meet the flood way requirements of this section.

Along watercourses that have not had a regulatory flood way designated, no new construction, substantial improvements or other development (including fill) shall be permitted within Zones Al-30 on the FIRM, unless it is demonstrated that the cumulative effect of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within the community.

Item VIII.

1. In special Hood hazard areas the Building Inspector shall determine the 100 year flood elevation in the following order of precedence according to the data available:

    a. In Zones Al-30 and AH, refer to the elevation provided in the communities Flood Insurance Study and accompanying FIRM or FHBM.

    b. In unnumbered A Zones, the Building Inspector shall obtain, review and reasonably utilize any 100 year flood elevation data available from Federal, State, development proposals submitted to the community (example sub-divisions, site approvals, etc.) or other source.

    c. In Zone AO to 100 year flood elevation is determined by adding the elevation of the highest adjacent grade to the depth number specified on the FIRM or, if no depth number is specified on the FIRM, at least two feet.

2. The Building Inspector's 100- year flood elevation is determination will be used as criteria for requiring in Zones AI-30, AE, AH AO, and A that:

a. All new construction and substantial improvements of residential structures have the lowest floor (including basement) elevated to or above the IOO year flood level;

b. That all new construction and substantial improvement of non-residential structures have the lowest floor (including basement) elevated to or above the 100 year flood level; or together with attendant utility and sanitary facilities, shall:

(i) be floodproofed so that below the 100 year flood elevation the structure is watertight with walls substantially impermeable to the passage of water;

(ii) have structural components capable of resisting hydrostatic and hydrodynamic loads and the effects of buoyancy; and

(iii) be certified by a registered professional engineer or architect that the design and methods of construction are in accordance with accepted standard of practice for meeting the provisions of this section;

c. All manufactured homes to be placed or substantially improved within special flood hazard areas shall be elevated on a permanent foundation such that the lowest floor of the manufactured home is at or above the base flood level; and be securely anchored to resist notation, collapse, or lateral movement. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors. This requirement is in addition to applicable state and local anchoring requirements for resisting wind forces;

d. For all new construction and substantial improvements, fully anchored areas below the lowest floor that are subject to flooding are permitted providing the enclosed areas meet the following requirements: (I) the enclosed area is unfinished or flood resistant, usable solely for parking of vehicles, building access or storage; (2) the area is not a basement; (3) shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or must 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, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters;

e. Proposed structures to be located on slopes in Special Flood Hazard Areas, Zones AH and AD, shall include adequate drainage paths to guide flood waters around and away form the proposed structures.