## Chapter 29

## FLOOD DAMAGE PREVENTION

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#### **GENERAL REFERENCES**

Building construction See Ch. 23. Subdivision of land C See Ch. 56. Zoning C See Ch. 70.

### § 29-1. Findings.

The Town Board of the Town of Canton finds that the potential and/or actual damages from flooding and erosion may be a problem to the residents of the Town of Canton and that such damages may include destruction or loss of private and public housing, damage to public facilities, both publicly and privately owned, and injury to and loss of human life. In order to minimize the threat of such damages and to achieve the purposes and objectives hereinafter set forth, this chapter is adopted.

# § 29-2. Purpose.

It is the purpose of this chapter to promote the public health, safety and general welfare and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:

- A. Regulate uses which are dangerous to health, safety and property due to water or erosion hazards or which result in damaging increases in erosion or in flood heights or velocities.
- B. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction.
- C. Control the alteration of natural flood plains, stream channels and natural protective barriers which are involved in the accommodation of floodwaters.
- D. Control filling, grading, dredging and other development which may increase erosion or flood damages.
- E. Regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands.

F. Qualify for and maintain participation in the National Flood Insurance Program.

# § 29-3. Objectives.

The objectives of this chapter are:

- A. To protect human life and health.
- B. To minimize expenditure of public money for costly flood control projects.
- C. To minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public.
- D. To minimize prolonged business interruptions.
- F. To minimize damage to public facilities and utilities such as water and gas mains, electric, telephone, sewer lines, streets and bridges located in areas of special flood hazard.
- G. To help maintain a stable tax base by providing for the sound use and development of areas of special flood hazard so as to minimize future flood blight areas.
- H. To provide that developers are notified that property is in an area of special flood hazard.
- I. To ensure that those who occupy the areas of special flood hazard assume responsibility for their actions.

## § 29-4. Definitions.

- A. Unless specifically defined below, words or phrases used in this chapter shall be interpreted so as to give them the meanings they have in common usage and to give this chapter its most reasonable application.
- B. As used in this chapter, the following words shall have the meanings indicated:

APPEAL - A request for a review of the local administrator's interpretation of any provision of this chapter or a request for a variance.

AREA OF SHALLOW FLOODING - A designated AO, All or VO Zone on a community's Flood Insurance Rate Map (FIRM) with a one-percent or greater annual chance of flooding to an average annual depth of one (1) to three (3) feet where a clearly defined channel does not exist, where the path of flooding is unpredictable and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow.

AREA OF SPECIAL FLOOD HAZARD - The land in the floodplain within a community subject to a one-percent or greater chance of flooding in any given year. This area may be designated as Zone A, AE, AH, AO, AI through A30, A99, V, VO, VE or V1 through V30. It is also commonly referred to as the "base floodplain" or "one-hundred-year floodplain."

BASE FLOOD - The flood having a one-percent chance of being equaled or exceeded in any given year.

BASEMENT - That portion of a building having its floor subgrade (below ground level) on all sides.

BUILDING - See "structure."

CELLAR - See "basement."

DEVELOPMENT - Any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, paving, excavation or drilling operations or storage of equipment or materials.

ELEVATED BUILDING - A non-basement building built, in the case of a building in Zones AI through A30, AE, A, A99, AO, AH, B, C, X or D, to have the top of the elevated floor or, in the case of a building in Zones Vi through V30, VE or V, to have the bottom of the lowest horizontal structure member of the elevated floor elevated above the ground level by means of pilings, columns (posts and piers) or shear walls parallel to the flow of the water and adequately anchored so as not to impair the structural integrity of the building during a flood of up to the magnitude of the base flood. In the case of Zones AI through A30, AE, A, A99, AO, AII, B, C, X or D, Aelevated building' also includes a building elevated by means of fill or solid foundation perimeter walls with openings sufficient to facilitate the unimpeded movement of floodwaters. In the case of Zones VI through V30, VE or V, "elevated building" also includes a building otherwise meeting the definition of "elevated building," even though the lower area is enclosed by means of breakaway walls that meet the federal standards.

EXISTING MANUFACTURED HOME PARK OR SUBDIVISION - 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 complete before the effective date of the floodplain management regulations adopted by the community.

EXPANSION TO AN EXISTING MANUFACTURED HOME PARK OR SUBDIVISION - The preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured 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).

FEDERAL EMERGENCY MANAGEMENT AGENCY - The federal agency that administers the National Flood Insurance Program.

FLOOD BOUNDARY AND FLOODWAY MAP (FBFM) - An official map of the community published by the Federal Emergency Management Agency as part of a riverside community's Flood Insurance Study. The "FBFM" delineates a regulatory floodway along watercourses studied in detail in the Flood Insurance Study.

FLOOD ELEVATION STUDY - An examination, evaluation and determination of the flood hazards and, if appropriate, corresponding water surface elevations, or an examination, evaluation and determination of flood-related erosion hazards.

#### FLOOD or FLOODING:

- 1. A general and temporary condition of partial or complete inundation of normally dry land areas from:
  - a. The overflow of inland or tidal waters; or
  - b. he unusual and rapid accumulation or runoff of surface waters from any source.
- "Flood or flooding" also means 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 a flash flood or an abnormal tidal surge, or by some similarly unusual and unforeseeable event which results in flooding as defined in Subsection (1)(a) above.

FLOOD HAZARD BOUNDARY MAP (FHBM) - An official map of a community, issued by the Federal Emergency Management Agency, where the boundaries of the areas of special flood hazard have been designated as Zone A but no flood elevations are provided.

FLOOD INSURANCE RATE MAP (FIRM) - An official map of a community, on which the Federal Emergency Management Agency has delineated both the areas of special flood hazard and the risk premium zones applicable to the community.

FLOOD INSURANCE STUDY - See "flood elevation study."

FLOODPLAIN or FLOOD-PRONE AREA - Any land area susceptible to being inundated by water from any source (see definition of "flooding').

FLOODPROOFING - Any combination of structural and nonstructural 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 - Has the same meaning as "regulatory floodway."

FUNCTIONALLY DEPENDENT USE - A use which cannot perform its intended purpose unless it is located or carried out in close proximity to water such as a docking or port facility necessary for the loading and unloading of cargo or passengers, shipbuilding and ship repair facilities. The term does not include long-term storage, manufacturing, sales or service facilities.

HIGHEST ADJACENT GRADE - The highest natural elevation of the ground surface, prior to construction, next to the proposed walls of a structure.

HISTORIC STRUCTURE - Any structure that is:

1. 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;
- 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;
- 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
- 4. Individually listed on a Local Inventory of Historic Places in communities with historic preservation programs that have been certified either:
  - a. By an approved state program as determined by the Secretary of the Interior: or
  - b. Directly by the Secretary of the Interior in states without approved programs.

LOCAL ADMINISTRATOR - The Code Enforcement Officer is appointed by the Town Board to administer and implement this chapter by granting or denying development permits in accordance with its provisions.

LOWEST FLOOR - The lowest floor of the lowest enclosed area (including basement or cellar). An unfinished or flood-resistant enclosure, usable solely for parking of vehicles, building access or storage in an area other than a basement area is not considered a buildings "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 this chapter.

MANUFACTURED HOME - A structure, transportable in one (1) or more sections and designed to be used with or without a permanent foundation when connected to the required utilities. The term does not include a "recreational vehicle."

MANUFACTURED HOME PARK OR SUBDIVISION - A parcel (or contiguous parcels) of land divided into two (2) or more manufactured home lots for rent or sale.

MEAN SEA LEVEL - 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.

MOBILE HOME - Has the same meaning as manufactured home, built on a permanent chassis.

NATIONAL GEODETIC VERTICAL DATUM (NGVD) - As corrected in 1929, a vertical control used as a reference for establishing varying elevations within the floodplain.

NEW CONSTRUCTION - Structures for which the start of construction commenced on or after the effective date of a floodplain management regulation adopted by the community, and includes any subsequent improvements to such structure.

NEW MANUFACTURED HOME PARK OR SUBDIVISION - 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 floodplain management regulations adopted by a community.

ONE-HUNDRED-YEAR FLOOD - The same meaning as 'base flood."

PRINCIPALLY ABOVE GROUND - That at least fifty-one percent (51%) of the actual cash value of the structure, excluding land value, is above ground.

RECREATIONAL VEHICLE - A vehicle which is:

- Built on a single chassis;
- 2. Four hundred (400) square feet or less when measured at the largest horizontal projections;
- 3. Designed to be self-propelled or permanently towable by a light-duty truck; and
- 4. Not designed primarily for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel or seasonal use.

REGULATORY FLOODWAY - 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 a designated height as determined by the Federal Emergency Management Agency in a Flood Insurance Study or by other agencies as provided in § 29-13B of this chapter.

START OF CONSTRUCTION - Includes substantial improvement and means the initiation, excluding planning and design, of any phase of a project or physical alteration of the property, and shall include land preparation, such as clearing, grading and filling; installation of streets and/or walkways; excavation for a basement, footings, piers or foundations; or the erection of temporary forms. It also includes the placement and/or installation on the property of accessory buildings (garages, sheds), storage trailers and building materials. For manufactured homes, the "actual start" means affixing of the manufactured home to its permanent site.

STRUCTURE - A walled and roofed building, including a gas or liquid storage tank, that is principally above ground, as well as a manufactured home.

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

SUBSTANTIAL IMPROVEMENT - Any reconstruction, rehabilitation, addition or other improvement of a structure, the cost of which equals or exceeds fifty percent (50%) of the market value of the structure before the start of construction of the improvement. The term includes structures which have incurred substantial damage, regardless of the actual repair work performed. The term does not, however, include either:

- 1. Any project for improvement of a structure to correct existing violations of state or local health, sanitary or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions; or
- 2. Any alteration of an historic structure, provided that the alteration will not preclude the structure's continued designation as an historic structure.

VARIANCE - A grant of relief from the requirements of this chapter which permits construction or use in a manner that would otherwise be prohibited by this chapter.

# § 29-5. Applicability.

This chapter shall apply to all areas of special flood hazard within the jurisdiction of the Town of Canton.

# § 29-6. Basis for establishing the areas of special flood hazard.

- A. The areas of special flood hazard are identified and defined on the following documents prepared by the Federal Emergency Management Agency:
  - 1. Flood Insurance Rate Map (multiple panels), Index No. 361172 0025-0100, whose effective date is August 17, 1998.
  - A scientific and engineering report entitled AFlood Insurance Study, Town of Canton, New York, St. Lawrence County@ dated August 17, 1998.
- B. The above documents are hereby adopted and declared to be a part of this chapter. The Flood Insurance Study and/or maps are on file at the office of the Canton Town Clerk, Town Hall, Canton, New York.

# § 29-7. Interpretation; conflict with other provisions.

- A. This chapter includes all revisions to the National Flood Insurance Program through November 1, 1989, and shall supersede all previous laws adopted for the purpose of flood damage prevention.
- B. In their interpretation and application, the provisions of this chapter shall be held to be minimum requirements, adopted for the promotion of the public health, safety and welfare. Whenever the requirements of this chapter are at variance with the requirements of any other lawfully adopted rules, regulations or ordinances, the most restrictive or that imposing the higher standards shall govern.

## § 29-8. Penalties for offenses.

- A. No structure in an area of special flood hazard shall hereafter be constructed, located, extended, converted or altered and no land shall be excavated or filled without full compliance with the terms of this chapter and any other applicable regulations. Any infraction of the provisions of this chapter by failure to comply with any of its requirements, including infractions of conditions and safeguards established in connection with conditions of the permit, shall constitute a violation.
- B. Any person who violates this chapter or fails to comply with any of its requirements shall, upon conviction thereof, be fined no more than two hundred fifty dollars (\$250.) or imprisoned for not more than fifteen (15) days, or both. Each day of noncompliance shall be considered a separate offense. Nothing herein contained shall prevent the Code Enforcement Officer from taking such other lawful action as necessary to prevent or remedy an infraction. Any structure found not compliant with the requirements of this chapter for which the developer and/or owner has not applied for and received an approved variance under §' 29-19 and 29-20 will be declared noncompliant and notification sent to the Federal Emergency Management Agency.

# § 29-9. Warning and disclaimer of liability.

The degree of flood protection required by this chapter is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by manmade or natural causes. This chapter does not imply that land outside the area of special flood hazards or uses permitted within such areas will be free from flooding or flood damages. This chapter shall not create liability on the part of the Town of Canton, any officer or employee thereof or the Federal Emergency Management Agency for any flood damages that result from reliance on this chapter or any administrative decision lawfully made hereunder.

## § 29-10. Designation of local administrator.

The Code Enforcement Officer is hereby appointed local administrator to administer and implement this chapter by granting or denying floodplain development permits in accordance with its provisions.

## § 29-11. Development permit.

- A. Purpose. A floodplain development permit is hereby established for all construction and other development to be undertaken in areas of special flood hazard in this community for the purpose of protecting its citizens from increased flood hazards and ensuring that new development is constructed in a manner that minimizes its exposure to flooding. It shall be unlawful to undertake any development in an area of special flood hazard, as shown on the Flood Insurance Rate Map enumerated in § 29-6, without a valid floodplain development permit. Application for a permit shall be made on forms furnished by the local administrator and may include but not be limited to plans, in duplicate, drawn to scale and showing the nature, location, dimensions and elevations of the area in question, existing or proposed structures, fill, storage of materials, drainage facilities and the location of the foregoing.
- B. Fees. All applications for a floodplain development permit shall be accompanied by an application fee. In addition, the applicant shall be responsible for reimbursing the Town of Canton for any additional costs necessary for review, inspection and approval of this project. The local administrator may require a deposit of no more than five hundred dollars (\$500.) to cover these additional costs.

# § 29-12. Permit application.

The applicant shall provide the following information as appropriate. Additional information may be required on the permit application form.

- A. The proposed elevation, in relation to mean sea level, of the lowest floor (including basement or cellar) of any new or substantially improved structure to be located in Zones AI through A30, AE or AH, or Zone A if base flood elevation data are available. Upon completion of the lowest floor, the permittee shall submit to the local administrator the as-built elevation, certified by a licensed professional engineer or surveyor.
- B. The proposed elevation, in relation to mean sea level, to which any new or substantially improved nonresidential structure will be flood-proofed. Upon completion of the flood-proofed portion of the structure, the permittee shall submit to the local administrator the as-built flood-proofed elevation, certified by a professional engineer or surveyor.

- C. A certificate from a licensed professional engineer or architect that any utility Flood-proofing will meet the criteria in § 29-15C, Utilities.
- D. A certificate from a licensed professional engineer or architect that any nonresidential flood-proofed structure will meet the flood-proofing criteria in § 29-17, Nonresidential structures
  - E. A description of the extent to which any watercourse will be altered or relocated as a result of proposed development. Computations by a licensed professional engineer must be submitted that demonstrate that the altered or relocated segment will provide equal or greater conveyance than the original stream segment. The applicant must submit any maps, computations or other material required by the Federal Emergency Management Agency (FEMA) to revise the documents enumerated in § 29-6, when notified by the local administrator, and must pay any fees or other costs assessed by FEMA for this purpose. The applicant must also provide assurances that the conveyance capacity of the altered or relocated stream segment will be maintained.
- F. A technical analysis by a licensed professional engineer, if required by the local administrator, which shows whether proposed development to be located in an area of special flood hazard may result in physical damage to any other property.
- G. In Zone A, when no base flood elevation data are available from other sources, base flood elevation data shall be provided by the permit applicant for subdivision proposals and other proposed developments (including proposals for manufactured home and recreational vehicle parks and subdivisions) that are greater than either fifty (50) lots or five (5) acres.
- § 29-13. Duties and responsibilities of the local administrator (The local administrator in the Town of Canton is the Code Enforcement Officer).

Duties of the local administrator shall include but not be limited to the following:

- A. Permit application review. The local administrator shall conduct the following permit application review before issuing a floodplain development permit:
  - Review all applications for completeness, particularly with the requirements of § 29-12, Permit application, and for compliance with the provisions and standards of this chapter.

- 2. Review subdivision and other proposed new development, including manufactured home parks, to determine whether proposed building sites will be reasonably safe from flooding. If a proposed building site is located in an area of special flood hazard, all new construction and substantial improvements shall meet the applicable standards of §' 29-14 through 29-18 and, in particular, § 29-14A, Subdivision proposals.
- 3. Determine whether any proposed development in an area of special flood hazard may result in physical damage to any other property (e.g., stream bank erosion and increased flood velocities). The local administrator may require the applicant to submit additional technical analyses and data necessary to complete the determination. If the proposed development may result in physical damage to any other property or fails to meet the requirements of §29-14 through 29-18, no permit shall be issued. The applicant may revise the application to include measures that mitigate or eliminate the adverse effects and resubmit the application.
- Determine that all necessary permits have been received from those governmental agencies from which approval is required by state or federal law.

#### B. Use of other flood data.

- 1. When the Federal Emergency Management Agency has designated areas of special flood hazard on the community's Flood Insurance Rate map (FIRM) but has neither produced water surface elevation data (these areas are designated Zone A or V on the FIRM) nor identified a floodway, the local administrator shall obtain, review and reasonably utilize any base flood elevation and floodway data available from a federal, state or other source, including data developed pursuant to § 29-12G, as criteria for requiring that new construction, substantial improvements or other proposed development meet the requirements of this chapter.
- 2. When base flood elevation data are not available, the local administrator may use flood information from any other authoritative source, such as historical data, to establish flood elevations within the areas of special flood hazard for the purposes of this chapter.

#### C. Alteration of watercourses. The local administrator shall:

1. Provide notification to adjacent communities and the New York State Department of Environmental Conservation prior to permitting any

- alteration or relocation of a watercourse and submittal of evidence of such notification to the Regional Director, Region II, Federal Emergency Management Agency.
- 2. Determine that the permit holder has provided for maintenance within the altered or relocated portion of said watercourse so that the flood-carrying capacity is not diminished.

## D. Construction stage.

- 1. The local administrator shall, in Zones Al through A30, AE and AH, and also Zone A if base flood elevation data are available, upon placement of the lowest floor or completion of flood-proofing of a new or substantially improved structure, obtain from the permit holder a certification of the as-built elevation of the lowest floor or flood-proofed elevation, in relation to mean sea level. The certificate shall be prepared by or under the direct supervision of a licensed land surveyor or professional engineer and certified by the same. For manufactured homes, the permit holder shall submit the certificate of elevation upon placement of the structure on the site. A certificate of elevation must also be submitted for a recreational vehicle if it remains on a site for one hundred eighty (180) consecutive days or longer (unless it is fully licensed and ready for highway use).
- 2. Any further work undertaken prior to submission and approval of the certification shall be at the permit holder's risk. The local administrator shall review all data submitted. Deficiencies detected shall be cause to issue a stop-work order for the project unless immediately corrected.
- E. Inspections. The local administrator and/or the developer's engineer or architect shall make periodic inspections at appropriate times throughout the period of construction in order to monitor compliance with permit conditions and to enable said inspector to certify, if requested, that the development is in compliance with the requirements of the floodplain development permit and/or any variance provisions.

# F. Stop-work orders.

- 1. The local administrator shall issue or cause to be issued a stop-work order for any floodplain development found ongoing without a development permit. Disregard of a stop-work order shall subject the violator to the penalties described in § 29-8 of this chapter.
- 2. The local administrator shall issue or cause to be issued a stop-work order for any floodplain development found noncompliant with the

provisions of this chapter and/or the conditions of the development permit. Disregard of a stop-work order shall subject the violator to the penalties described in § 29-8 of this chapter.

## G. Certificate of compliance.

- 1. In areas of special flood hazard, as determined by documents enumerated in § 29-6, it shall be unlawful to occupy or to permit the use or occupancy of any building or premises, or both, or part thereof hereafter created, erected, changed, converted or wholly or partly altered or enlarged in its use or structure until a certificate of compliance has been issued by the local administrator stating that the building or land conforms to the requirements of this chapter.
- 2. A certificate of compliance shall be issued by the local administrator upon satisfactory completion of all development in areas of special flood hazard.
- 3. Issuance of the certificate shall be based upon the inspections conducted as prescribed in § 29-13E, Inspections, and/or any certified elevations, hydraulic data, floodproofing, anchoring requirements or encroachment analyses which may have been required as a condition of the approved permit.
- H. Information to be retained. The local administrator shall retain and make available for inspection copies of the following:
  - 1. Floodplain development permits and certificates of compliance.
  - 2. Certifications of as-built lowest floor elevations of structures, required pursuant to § 29-13D(1) and (2), and whether or not the structures contain a basement.
  - 3. Flood-proofing certificates required pursuant to § 29-13D(1), and whether or not the structures contain a basement.
  - 4. Variances issued pursuant to §' 29-19 and 29-20.
  - 5. Notices required under § 29-13C, Alteration of watercourses.

## § 29-14. General standards.

The following standards apply to new development, including new and substantially improved structures, in the areas of special flood hazard shown on the Flood Insurance Rate Map designated in § 29-6.

- A. Subdivision proposals. The following standards apply to all new subdivision proposals and other proposed development in areas of special flood hazard (including proposals for manufactured home and recreational vehicle parks and subdivisions):
  - 1. Proposals shall be consistent with the need to minimize flood damage.
  - 2. Public utilities and facilities such as sewer, gas, electrical and water systems shall be located and constructed so as to minimize flood damage.
  - Adequate drainage shall be provided to reduce exposure to flood damage.

#### B. Encroachments.

- 1. Within Zones Al through A30 and AE, on streams without a regulatory floodway, no new construction, substantial improvements or other development (including fill) shall be permitted unless:
  - a. The applicant demonstrates 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 (1) foot at any location; or
  - b. The Town of Canton agrees to apply to the Federal Emergency Management Agency (FEMA) for a conditional FIRM revision, FEMA approval is received and the applicant provides all necessary data, analyses and mapping and reimburses the Town of Canton for all fees and other costs in relation to the application. The applicant must also provide all data, analyses and mapping and reimburse the Town of Canton for all costs related to the final map revision.
- 2. On streams with a regulatory floodway, as shown on the Flood Boundary and Floodway Map or the Flood Insurance Rate Map adopted in § 29-6, no new construction, substantial improvements or other development in the floodway (including fill) shall be permitted unless:
  - a. A technical evaluation by a licensed professional engineer shows that such an encroachment shall not result in increase in flood levels during occurrence of the base flood; or
  - b. The Town of Canton agrees to apply to the Federal Emergency Management Agency (FEMA) for a conditional FIRM and floodway revision, FEMA approval is received and the applicant provides all necessary data, analyses and mapping and

reimburses the Town of Canton for all fees and other costs in relation to the application. The applicant must also provide all data, analyses and mapping and reimburse the Town of Canton for all costs related to the final map revisions.

## § 29-15. Standards for all structures.

- A. Anchoring. New structures and substantial improvement to structures in areas of special flood hazard shall be anchored to prevent flotation, collapse or lateral movement during the base flood. This requirement is in addition to applicable state and local anchoring requirements for resisting wind forces.
- B. Construction materials and methods.
  - New construction and substantial improvements to structures shall be constructed with materials and utility equipment resistant to flood damage.
  - New construction and substantial improvements to structures shall be constructed using methods and practices that minimize flood damage.
  - 3. For enclosed areas below the lowest floor of a structure within Zones Al through A30, AE or All, and also Zone A if base flood elevation data are available, new and substantially improved structures shall have fully enclosed areas below the lowest floor that are usable solely for parking of vehicles, building access or storage in an area other than a basement and which are subject to flooding 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 licensed professional engineer or architect or meet or exceed the following minimum criteria:
    - a. A minimum of two (2) openings having a total net area of not less than one (1) square inch for every square foot of enclosed area subject to flooding shall be provided.
    - b. The bottom of all such openings shall be no higher than one (1) foot above the lowest adjacent finished grade.
    - c. Openings may be equipped with louvers, valves, screens or other coverings or devices, provided that they permit the automatic entry and exit of floodwaters. Enclosed areas sub-grade on all sides are considered basements and are not permitted.

#### C. Utilities.

- 1. Machinery and equipment servicing a building must either be elevated to or above the base flood level or designed to prevent water from entering or accumulating within the components during a flood. This includes heating, ventilating and air-conditioning equipment, hotwater heaters, appliances, elevator lift machinery and electrical junction and circuit breaker boxes. When located below the base flood elevation, a professional engineer's or architect's certification of the design is required.
- 2. New and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system.
- 3. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters. Sanitary sewer and storm drainage systems for buildings that have openings below the base flood elevation shall be provided with automatic backflow valves or other automatic backflow devices that are installed in each discharge line passing through a buildings exterior wall.
- 4. On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

# § 29-16. Residential structures.

- A. Elevation. The following standards, in addition to the standards in § 29-14A, Subdivision proposals, § 29-14B, Encroachments, and § 29-15, Standards for all structures, apply to structures located in areas of special flood hazard as indicated.
  - Within Zones Al through A30, AE and All, and also Zone A if base flood elevation data are available, new construction and substantial improvements shall have the lowest floor (including basement) elevated to one (1) foot above the base flood level.
  - 2. Within Zone A, when no base flood elevation data are available, new and substantially improved structures shall have the lowest floor (including basement) elevated at least three (3) feet above the highest adjacent grade.
  - 3. Within Zone AO, new and substantially improved structures shall have the lowest floor (including basement) elevated above the highest adjacent grade at least as high as the depth number specified in feet on the community's Flood Insurance Rate Map enumerated in § 29-6 [at least two (2) feet if no depth number is specified].

 Within Zones All and AO, adequate drainage paths are required to guide floodwaters around and away from proposed structures on slopes.

# § 29-17. Nonresidential structures.

The following standards apply **to new and** substantially improved commercial, industrial and other nonresidential structures, in addition to the requirements in § 29-14A, Subdivision proposals, § 29-14B, Encroachments, and § 29-15, Standards for all structures.

- A. Within Zones Al through A30, AE and All, and also Zone A if base flood elevation data are available, new construction and substantial improvements of any nonresidential structure, together with attendant utility and sanitary facilities, shall either:
  - 1. Have the lowest floor, including basement or cellar, elevated to one (1) foot above the base flood elevation; or
  - Be flood-proofed so that the structure is watertight below the base flood level with walls substantially impermeable to the passage of water. All structural components located below the base flood level must be capable of resisting hydrostatic and hydrodynamic loads and the effects of buoyancy.
- B. Within Zone AO, new construction and substantial improvements of nonresidential structures shall:
  - Have the lowest floor (including basement) elevated above the highest adjacent grade at least as high as the depth number specified in feet on the community's FIRM [at least two (2) feet if no depth number is specified]; or
  - 2. Together with attendant utility and sanitary facilities, be completely flood-proofed to that level to meet the flood-proofing standard specified in § 29-17A(2).
- C. If the structure is to be flood-proofed, a licensed professional engineer or architect shall develop and/or review structural design, specifications and plans for construction. A flood-proofing certificate or other certification shall be provided to the local administrator that certifies the design and methods of construction are in accordance with accepted standards of practice for meeting the provisions of § 29-17A(2), including the specific elevation (in relation to mean sea level) to which the structure is to be

flood-proofed.

- D. Within Zones AB and AO, adequate drainage paths are required to guide floodwaters around and away from proposed structures on slopes.
- E. Within Zone A, when no base flood elevation data are available, the lowest floor (including basement) shall be elevated at least three (3) feet above the highest adjacent grade.

## § 29-18. Manufactured homes and recreational vehicles.

The following standards in addition to the standards in § 29-14, General standards, and § 29-15, Standards for all structures, apply, as indicated, in areas of special flood hazard to manufactured homes and to recreational vehicles which are located in areas of special flood hazard.

- A. Recreational vehicles placed on sites within Zones Al through A30, AE and AH shall either be on-site fewer than one hundred (180) consecutive days, be fully licensed and ready for highway use or meet the requirements for manufactured homes in § 29-18B, D and E. A recreational vehicle is ready for highway use if it is on its wheels or jacking system, is attached to the site only by quick-disconnect-type utilities and security devices and has no permanently attached additions.
- B. A manufactured home that is placed or substantially improved in Zones AI through A30, AE and All that is on a site either outside of an existing manufactured home park or subdivision, as herein defined; in an expansion to an existing manufactured home park or subdivision, as herein defined; or in an existing manufactured home park or subdivision, as herein defined, on which a manufactured home park or subdivision, as herein defined, on which a manufactured home has incurred substantial damage as the result of a flood shall be elevated on a permanent foundation such that the lowest floor is elevated to one (1) foot above the base flood elevation and is securely anchored to an adequately anchored foundation system to resist flotation, collapse and lateral movement. Elevation on piers consisting of dry stacked blocks is prohibited. Methods of anchoring may include but are not limited to use of over-the-top or frame ties to ground anchors.
- C. A manufactured home to be placed or substantially improved in Zones Al through A30, AE and All in an existing manufactured home park or subdivision that is not to be placed on a site on which a manufactured

home has incurred substantial damage shall be:

- 1. Elevated in a manner such as required in § 29-18B; or
- 2. Elevated such that the manufactured home chassis is supported by reinforced piers or other foundation elements of at least equivalent strength that are no less than thirty-six (36) inches in height above the lowest adjacent grade and are securely anchored to an adequately anchored foundation system to resist flotation, collapse or lateral movement. Elevation on piers consisting of dry stacked blocks is prohibited.
- D. Within Zone A, when no base flood elevation data are available, new and substantially improved manufactured homes shall be elevated such that the manufactured home chassis is supported by reinforced piers or other foundation elements of at least equivalent strength that are no less than thirty-six (36) inches in height above the lowest adjacent grade and are securely anchored to an adequately anchored foundation system to resist flotation, collapse or lateral movement. Elevation on piers consisting of dry stacked blocks is prohibited.
- E. Within Zone AO, the floor shall be elevated above the highest adjacent grade at least as high as the depth number specified on the Flood Insurance Rate Map enumerated in § 29-6 [at least two (2) feet if no depth number is specified]. Elevation on piers consisting of dry stacked blocks is prohibited.

# § 29-19. Appeals Board.

- A. The Zoning Board of Appeals as established by the Town of Canton shall hear and decide appeals and requests for variances from the requirements of this chapter.
- B. The Zoning Board of Appeals shall hear and decide appeals when it is alleged there is an error in any requirement, decision or determination made by the local administrator in the enforcement or administration of this chapter.
- C. Those aggrieved by the decision of the Zoning Board of Appeals may appeal such decision to the Supreme Court pursuant to Article 78 of the Civil Practice Law and Rules.

- D. In passing upon such applications, the Zoning Board of Appeals shall consider all technical evaluations, all relevant factors, standards specified in other sections of this chapter and:
  - 1. The danger that materials may be swept onto other lands to the injury of others.
  - 2. The danger to life and property due to flooding or erosion damage.
  - 3. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner.
  - 4. The importance of the services provided by the proposed facility to the community.
  - 5. The necessity to the facility of a waterfront location, where applicable.
  - 6. The availability of alternative locations for the proposed use which are not subject to flooding or erosion damage.
  - 7. The compatibility of the proposed use with existing and anticipated development.
  - 8. The relationship of the proposed use to the Comprehensive Plan and floodplain management program of that area.
  - 9. The safety of access to the property in times of flood for ordinary and emergency vehicles.
  - 10. The costs to local governments and the dangers associated with conducting search and rescue operations during periods of flooding.
  - 11. The expected heights, velocity, duration, rate of rise and sediment transport of the floodwaters and the effects of wave action, if applicable, expected at the site.
  - 12. The costs of providing governmental services during and after flood conditions, including search and rescue operations, maintenance and repair of public utilities and facilities such as sewer, gas, electrical and water systems and streets and bridges.
- E. Upon consideration of the factors of § 29-19D and the purposes of this chapter, the Zoning Board of Appeals may attach such conditions to the granting of variances as it deems necessary to further the purposes of this chapter.
- F. The local administrator shall maintain the records of all appeal actions, including technical information, and report any variances to the Federal Emergency Management Agency upon request.

## § 29-20. Conditions for variances.

A. Generally, variances may be issued for new construction and substantial

improvements to be erected on a lot of one-half (2) acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, provided that the items in § 29-19D(1) through (12) have been fully considered. As the lot size increases beyond the one-half (2) acre, the technical justification required for issuing the variance increases.

- B. Variances may be issued for the repair or rehabilitation of historic structures upon determination that:
  - 1. The proposed repair or rehabilitation will not preclude the structure's continued designation as an historic structure.
  - 2. The variance is the minimum necessary to preserve the historic character and design of the structure.
- C. Variances may be issued by a community for new construction and substantial improvements and for other development necessary for the conduct of a functionally dependent use, provided that:
  - 1. The criteria of Subsections A, D, E and F of this section are met.
  - 2. The structure or other development is protected by methods that minimize flood damages during the base flood and create no additional threat to public safety.
- D. Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result.
- E. Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
- F. Variances shall only be issued upon receiving written justification of:
  - 1. A showing of good and sufficient cause.
  - 2. A determination that failure to grant the variance would result in exceptional hardship to the applicant.
  - 3. A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety or extraordinary public expense or create nuisances or cause fraud on or victimization of the public or conflict with existing local laws or ordinances.

G. Any applicant to whom a variance is granted for a building with the lowest floor below the base flood elevation shall be given written notice over the signature of a community official that the cost of flood insurance will be commensurate with the increased risk resulting from lowest floor elevation.