#### FLOOD DAMAGE PREVENTION ORDINANCE

### Section 1. Purpose and Objectives

This ordinance, when adopted shall replace the Flood Damage Prevention Ordinance of June 10, 1998.

It is the purpose of this ordinance to promote the public health, safety and general welfare and to minimize public and private losses due to flood conditions in specific areas. The flood hazard areas of the Town of Voluntown are subject to periodic inundation which results in loss of life and property, health and safety hazards, disruption of commerce and government services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base, all of which adversely affect public health, safety and general welfare.

- 1.1 <u>"Statutory Authorization"</u> The Legislature of the State of Connecticut has in Section 7-148(c)(7) of the General Statutes delegated the responsibility to local governmental units to adopt regulations designed to promote the public health, safety and general welfare of its citizenry. Therefore, the Board of Selectmen of the Town of Voluntown, Connecticut, does ordain as follows:
- 1.2 <u>"Compliance and Permit"</u> No structure or land shall hereafter be located, extended, converted, modified or structurally altered without full compliance with the terms of this ordinance and other applicable regulations. No development activities shall be commenced without the prior issuance of a permit under this Ordinance.
- 1.3 <u>"Abrogation and Greater Restrictions"</u> This ordinance is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. Where this ordinance and another conflict or overlap, whichever imposes the more stringent restrictions shall prevail.
- "Warning and Disclaimer of Liability" The degree of flood protection required by this ordinance is considered the minimum reasonable for regulatory purposes and is based on scientific engineering consideration. Larger floods can and will occur on rare occasions. Flood heights may be increased by man-made or natural causes. This ordinance does not imply that land outside the special flood hazard areas or uses permitted within such areas will be free from flooding or flood damage. This ordinance shall not create liability on the part of the Town of Voluntown, any officer or employee thereof, or the Federal Emergency Management Agency (FEMA) for any flood damages that result from reliance on this ordinance or any administrative decision lawfully made hereunder
- 1.5 <u>"Severability"</u> If any section, subsection, paragraph, sentence, clause, or phrase of this ordinance should be declared invalid for any reason whatsoever, such decision shall not affect the remaining portions of this ordinance, which shall remain in full force and effect; and to this end the provisions of this ordinance are hereby declared to be severable.

#### Section 2. Definitions

Unless specifically defined below, words or phrases used in this ordinance shall be interpreted so as to give them the meaning they have in common usage and to give this ordinance its most reasonable application..

2.1 <u>"Area of Special Flood Hazard"</u> is the land in the floodplain within a community subject to one percent or greater chance of flooding in any given year.

- 2.2 "<u>Base Flood</u>" means the flood having a one percent chance of being equaled or exceeded in any given year.
- 2.3 <u>"Base Flood Elevation"</u> (BFE) means the elevation of the crest of the base flood or 100-year flood. The height in relation to mean sea level expected to be reached by the waters of the base flood at pertinent points in the floodplains of coastal and river line areas.
- 2.4 "Basement" means any area of the building having its floor sub grade on all sides.
- 2.5 "Building" means see the definition for "structure."
- 2.6 "Cost" means, as related to substantial improvements, the cost of any reconstruction, rehabilitation, addition, alteration, repair or other improvement of a structure shall be established by a detailed written contractor's estimate. The estimate shall include, but not be limited to: the cost of materials (interior finishing elements, structural elements, utility and service equipment); sales tax on materials, building equipment and fixtures, including heating and air conditioning and utility meters; labor; built-in appliances; demolition and site preparation; repairs made to damaged parts of the building worked on at the same time; contractor's overhead; contractor's profit; and grand total. Items to be excluded include: cost of plans and specifications, survey costs, permit fees, outside improvements such as septic systems, water supply wells, landscaping, sidewalks, fences, yard lights, irrigation systems, and detached structures such as garages, sheds, and gazebos.
- 2.7 "Development" means any man-made change to improved or unimproved real estate, including but not limited to the construction of building or structures; the construction of additions, alterations or substantial improvements to buildings or structures; the placement of buildings or structures; mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment; the storage, deposition, or extraction of materials; and the installation, repair or removal of public or private sewage disposal systems or water supply facilities.
- 2.8 "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 June 3, 1988, the effective date of the floodplain management regulations adopted by the community.
- 2.9 "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 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).
- 2.10 "<u>Federal Emergency Management Agency (FEMA)</u>" means the federal agency that administers the National Flood Insurance Program (NFIP)
- 2.11 "<u>Finished Living Space</u>" means, as related to fully enclosed areas below the base flood elevation (BFE), a space that is, but is not limited to, heated and/or cooled, contains finished floors (tile, linoleum, hardwood, etc.), has sheetrock walls that may or may not be painted or wallpapered, and other amenities such as furniture, appliances, bathrooms, fireplaces and other items that are easily damaged by floodwaters and expensive to clean, repair or replace.

- 2.12 <u>"Flood or Flooding"</u> means a general and temporary condition of partial or complete inundation of normally dry land areas from either the overflow of inland or tidal waters, or the unusual and rapid accumulation/runoff of surface waters from any source.
- 2.13 "Flood Insurance Rate Map" (FIRM) means an official map of a community, on which the Federal Emergency Management Agency (FEMA) has delineated both the special hazard areas and the risk premium zones applicable to the community.
- 2.14 "Flood Insurance Study" means the official study of a community in which the Federal Emergency Management Agency (FEMA) has conducted an examination, evaluation and determination of flood hazards and, if appropriate, corresponding water surface elevations.
- 2.15 "<u>Floodway</u>" 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.
- 2.16 "Functionally Dependent Use or Facility" means a use or facility that 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. The term does not include seafood processing facilities, long-term storage, manufacturing, sales or service facilities.
- 2.17 "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 preliminary 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 historic significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district; (c) Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of the Interior; or (d) Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either: (1) By an approved state program as determined by the Secretary of the Interior or (2) Directly by the Secretary of the Interior in states without approved programs.
- 2.18 "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 areas must be designed in accordance with Section 5.2.3 of this ordinance.
- 2.19 "Manufactured Home" means a structure, transportable in one or more sections, which is built on a permanent chassis and designed to be used with or without permanent foundation when connected to the required utilities. The term also includes recreational vehicles, park trailers, travel trailers, and similar transportable structures placed on a site for 180 consecutive days or longer and intended to be improved property.
- 2.20 "<u>Manufactured Home Park or Subdivision</u>" means a parcel or contiguous parcels of land divided into two (2) or more manufactured home lots for rent or sale.
- 2.21 <u>"Market Value"</u> means, as related to substantial improvement and substantial damage, the market value of the structure shall be determined by the appraised value of the structure prior to the start of the initial repair or improvement, or in the case of damage, the value of the structure prior to the damage occurring.

- 2.22 "<u>Mean Sea Level</u>" means, for purposes of the National Flood Insurance Program, the North American Vertical Datum (NAVD) of 1988 or other datum, to which base flood elevation shown on a community's Flood Insurance Rate Map are referenced.
- 2.23 "New Construction" means structures for which the "start of construction" commenced on or after June 3, 1988, the effective date of the floodplain management regulations, and includes any subsequent improvements to such structures.
- 2.24 "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 June 3, 1988, the effective date of the floodplain management regulation adopted by the community.
- 2.25 "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 towed by a light duty truck
  - d. Designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.
- 2.26 "Start of Construction" includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, or improvement was within 180 days of the permit date. The actual start means the first placement of permanent construction of a structure (including a manufactured home) on a site, such as the pouring of slabs or footings, installation of piles, construction of columns, or any work beyond the stage of excavation or 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 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, whether or not that alteration affects the external dimensions of the building.
- 2.27 "<u>Structure</u>" means a walled and roofed building, including a gas or liquid storage tank that is principally above ground, as well as a manufactured home.
- 2.28 "Substantial Improvement" means any combination or repairs, reconstruction, alteration or improvements to a structure taking place within a 10 year period, 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:
  - a. The appraised value of the structure prior to the start of the initial repair or improvement, or
  - b. 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.

- 2.29 "<u>Substantial Damage</u>" means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.
- 2.30 "<u>Variance</u>" means a grant of relief by a community from the terms of the floodplain management regulation that allows construction in a manner otherwise prohibited and where specific enforcement would result in unnecessary hardship.
- 2.31 "<u>Violation</u>" means a failure of a structure or other development to be fully compliant with the community's floodplain management regulations. A structure or other development without required permits, lowest floor elevation documentation, flood-proofing certificates or required floodway encroachment calculations is presumed to be in violation until such time as that documentation is provided.
- 2.32 "<u>Water Surface Elevation</u>" means the height, in relation to the North American Vertical Datum (NAVD) of 1988 (or other datum, where specified), of floods of various magnitudes and frequencies in the floodplains of coastal or riverine areas.

# Section 3. <u>General Provisions</u>

This ordinance shall apply to all areas of special flood hazard identified by the Federal Emergency Management Agency (FEMA) in its Flood Insurance Study (FIS) for New London County, Connecticut, dated July 18, 2011, and accompanying Flood Insurance Rate Maps (FIRM), dated July 18, 2011, and other supporting data applicable to the Town of Voluntown, and any subsequent revisions thereto, or adopted by reference and declared to be a part of this ordinance. Since mapping is legally adopted by reference into this ordinance it must take precedence when more restrictive until such time as a map amendment or map revision is obtained from FEMA. The area of special flood hazard includes any area shown on the FIRM as Zones A and AE, including areas designated as a floodway on a FIRM. Areas of special flood hazard are determined utilizing the base flood elevations (BFE) provided on the flood profiles in the Flood Insurance Study (FIS) for a community. BFEs provided on a Flood Insurance Rate Map (FIRM) are only approximate (rounded up or down) and should be verified with the BFEs published in the FIS for a specific location. A Development Permit shall be required in conformance with the provisions of this ordinance prior to the commencement of any development activities.

# Section 4. <u>Duties and Responsibilities of the Zoning Enforcement Officer</u>

Duties of the Zoning Enforcement Officer shall include, but not limited to:

- 4.1 Review of all permit applications to determine whether proposed building sites will be reasonably safe from flooding.
- 4.2 Assure that all additional Federal or State permits have been acquired for the project by the permitee. Notify adjacent communities that the Department of Environmental Protection, Inland Water Resources Division prior to any alteration or relocation of a watercourse. Assure that maintenance is provided within the altered or relocated portion of said watercourse so that the flood-carrying capacity is not diminished.
- 4.3 Record the elevation (in relation to mean sea level) of the lowest floor (including basement) of all new or substantially improved or flood proof structures. When flood-proofing is utilized for a particular structure the Zoning Enforcement Officer shall obtain certification from a registered professional engineer or architect.

- 4.4 When base flood elevation data or Floodway data have not been provided, then the Zoning Enforcement Officer shall obtain, review and reasonably utilize any base flood elevation and floodway data available from a Federal, State or other source in order to administer the provisions of Sections 5.2 and 5.3.
- 4.5 Where interpretation is needed as to the exact location of boundaries of the areas of special flood hazard, the Zoning Enforcement Officer shall make the necessary interpretation. All records pertaining to the provisions of this ordinance shall be maintained in the office of the Zoning Enforcement Officer.

# Section 5. Provisions for Flood Hazard Reduction

# 5.1 "General Standards"

In all areas of special flood hazard the following provisions are required.

- 5.1.1 "New Construction and Substantial Improvement" New construction and substantial improvement shall be:
  - (a) Anchored to prevent flotation, collapse or lateral movement of the structure
  - (b) Constructed with materials and utility equipment resistant to flood damage
  - (c) Constructed by methods and practices that minimize flood damage
  - (d) Constructed with electrical, heating, ventilation, plumbing, 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.
- 5.1.2 "Water Supply and Sanitary Sewage Systems" New and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters. On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding.
- 5.1.3 "Manufactured Homes" All manufactured homes to be placed within Zone A and AE on a community's FIRM shall be installed using methods and practices which minimize flood damage. For purposes of this requirement, manufactured homes must be elevated and anchored to resist flotation, 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.
- 5.2 "<u>Specific Standards</u>" In all areas of special flood hazard where base flood elevation data has been provided, as set forth in Section 3 or as determined in Section 4.4, the following provisions, in addition to those in Section 5.1, are required:
  - 5.2.1 "<u>Residential Structures</u>" New construction or substantial improvement of any residential structure shall have the lowest floor, including basement, elevated to or above the base flood elevation.
  - 5.2.2 "Floodproofing" All new construction or substantial improvement of non-residential structures located in all A and AE Zones shall have the bottom of the lowest floor, including basement, elevated to or above the base flood elevation or, in lieu of being elevated, may be dry flood-proofed so that up to one foot (1') above the base flood

elevation, the structure, together with all attendant utilities and sanitary facilities, is watertight with walls subsequently impermeable to the passage of water, and use of structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effect of buoyancy. Electrical, plumbing, machinery or other utility equipment that service the structure must be elevated to or above the BFE. A registered professional engineer or architect shall review and/or develop structural design, specifications, and plans for the construction, and shall certify that the design and methods of construction are in accordance with acceptable standards of practice for meeting the provisions of this subsection.

- 5.2.3 "<u>Elevated Buildings</u>" New construction or substantial improvements of elevated buildings that include fully enclosed areas formed by foundation and other exterior walls below the base flood elevation in other areas that a basement shall be designed to preclude finished living space and designed to allow for the entry and exit of floodwaters to automatically equalized hydrostatic flood forces on exterior walls. Designs for complying with this requirement must either be certified by a professional engineer or architect or meet the following minimum criteria:
  - (a) Provide a minimum of two openings having a total net area of not less than one square inch for every square inch for every square foot of enclosed area subject to flooding
  - (b) The bottom of all openings shall be no higher than one foot above grade
  - (c) Openings may be equipped with screens, louvers, valves or other coverings or devices provided they permit the automatic flow of floodwaters in both directions.
- 5.2.4 "Manufactured Homes" All manufactured homes, including a recreational vehicle placed on a site for 180 consecutive days or longer, shall have the lowest floor elevated to or above the base flood elevation. This includes a manufactured home located outside a manufactured home park or subdivision, in a new manufactured home park or subdivision, in an existing manufactured home park or subdivision, in an expansion to an existing manufactured home park or subdivision, or on a site in an existing park in which a manufactured home has incurred substantial damage as a result of a flood. They shall be placed on a permanent foundation which itself is securely anchored and to which the structure is securely anchored so that it will resist flotation, lateral movement, and hydrostatic and hydrodynamic pressures. Anchoring may include, but not be limited to, the use of over-the-top or frame ties to ground anchors. It shall be installed using methods and practices which minimize flood damage, providing adequate access and drainage, piling foundations (when used) no more than 10 feet apart, and reinforced of any piers more than 6 feet above ground level.

Recreational vehicles shall either be on the site for fewer than 180 consecutive days and be fully licensed and ready for highway use, or meet all the general standards of section 5.1 and the elevation and anchoring requirements of this section and section 5.1.3. 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.

5.2.5 In A-zones where base flood elevations have been determined, but before a floodway is designated, require that no new construction, substantial improvement, or other development (including fill) be permitted which would increase base flood elevations more than one (1) foot at any point along the watercourse when all anticipated development is considered cumulatively with the proposed development.

- 5.3 "Floodways" In areas where floodways have been determined:
  Prohibit encroachments, including fill, new construction, substantial improvements and other developments unless certification (with supporting technical data) by a Connecticut registered professional engineer is provided demonstrating, through hydrologic and hydraulic analyses performed in accordance with standard engineering practice, that encroachments shall not result in any (0.00) increase in flood levels during occurrence of the base flood discharge. Fences in the floodway must be aligned with the flow and be of an open design. When utilizing data other than that provided by the Federal Emergency Management Agency for watercourses without FEMA-published floodways, the following standard applies: the community shall select and adopt a regulatory floodway based on the principle that the area chosen for the regulatory floodway must be designed to carry the waters of the base flood, without increasing the water surface elevation of that flood more than one foot at any one point within the community.
- 5.4 "Equal Conveyance" Within the floodplain, except those areas which are tidally influenced, as designated on the Flood Insurance Rate Map (FIRM) for the community, encroachments resulting from filling, new construction or substantial improvements involving an increase in footprint of the structure, are prohibited unless the applicant provides certification by a registered professional engineer demonstrating, with supporting hydrologic and hydraulic analyses performed in accordance with standard engineering practice, that such encroachments shall not result in any (0.00 feet) increase in flood levels (base flood elevation). Work within the floodplain and the land adjacent to the floodplain, including work to provide compensatory storage shall not be constructed in such a way so as to cause an increase in flood stage or flood velocity.
- 5.5 "Compensatory Storage" The water holding capacity of the floodplain, except those areas which are tidally influenced, shall not be reduced. Any reduction caused by filling, new construction or substantial improvements involving an increase in footprint to the structure, shall be compensated for by the deepening and/or widening of the floodplain. Storage shall be provided within the same hydraulic reach and a volume not previously used for flood storage; it shall be hydraulically comparable and incrementally equal to the theoretical volume of flood water at each elevation, up to and including the 100-year flood elevation, which would be displaced by the proposed project. Such compensatory volume shall have an unrestricted hydraulic connection to the same waterway or water body. Compensatory storage can be provided off-site if approved by the municipality.
- 5.6 "Aboveground Storage Tanks" Above-ground storage tanks (oil, propane, etc.) which are located outside or inside of the structure must either be elevated above the base flood elevation (BFE) on a concrete pad, or be securely anchored with tie-down straps to prevent flotation or lateral movement, have the top of the fill pipe extended above the BFE, and have a screw fill cap that does not allow for the infiltration of flood water.
- 5.7 "Portion of Structure in Flood Zone" If any portion of a structure lies within the Special Flood Hazard Area (SFHA), the entire structure is considered to be in the SFHA. The entire structure must meet the construction requirements of the flood zone. The structure includes any attached additions, garages, decks, sunrooms, or any other structure attached to the main structure. Decks or porches that extend into a more restrictive flood zone will require the entire structure to meet the standards of the more restrictive zone.

- 5.8 <u>"Structures in Two Flood Zones"</u> If a structure lies within two or more flood zones, the construction standards of the most restrictive zone apply to the entire structure (i.e., V zone is more restrictive than A zone; structure must be built to the highest BFE). The structure includes any attached additions, garages, decks, sunrooms, or any other structure attached to the main structure. (Decks or porches that extend into a more restrictive zone will require the entire structure to meet the requirements of the more restrictive zone.)
- 5.9 <u>"No Structures Entirely or Partially Over Water"</u> New construction, substantial improvements and repair to structures that have sustained substantial damage cannot be constructed or located entirely or partially over water unless it is a functionally dependent use or facility

### Section 6. Standards for Subdivision Proposals

In all special flood hazard areas the following requirements shall apply:

- (a) All subdivisions proposals shall be consistent with the need to minimize flood damage
- (b) All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage
- (c) All subdivision proposals shall have adequate drainage provided to reduce exposure to flood hazards
- (d) In Zone A, base flood elevation data shall be provided for subdivision proposals and other proposed development (including manufactured home parks and subdivisions) which are five acres or fifty lots, whichever occurs first.

#### Section 7. Variance Procedures

The Board of Selectmen shall hear and decide appeals and requests for variances from the requirements of this ordinance.

# 7.1 "Criteria for Variances"

- 7.1.1 Variances shall be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief; and in the instance of a historical building, a determination that the variance is the minimum necessary as not to destroy the historic character and result in the loss of historic designation of the building.
- 7.1.2 Variances may only be issued upon:
  - (a) A showing of good and sufficient cause and,
  - (b) A determination that failure to grant the variance would result in exceptional hardship and,
  - (c) A determination that the granting of a variance will not result in increased flood heights, additional threat to public safety, extraordinary public expense, create nuisance, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances.

Only hardships which are based on unusual physical characteristics of the property in question, characteristics which are not shared by adjacent parcels, shall qualify. Claims of hardship based on the structure, on economic or on

personal circumstances are not sufficient cause for the granting of a variance under this ordinance.

- 7.2 Any applicant to whom a variance is granted shall be given written notice specifying the difference between the base flood elevation and the elevation to which the structure is to be built and stating that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation up to amounts as high as \$25 for \$100 of insurance coverage.
- 7.3 The Board of Selectmen shall maintain the records of all appeal actions and report any variances to the Federal Emergency Management Agency in its biennial report.

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