#18-03

CHAPTER 3 ARTICLE III FLOOD PLAIN MANAGEMENT*

BE IT ORDAINED BY THE COUNCIL OF THE TOWN OF WINDSOR:

Chapter 3, Article III, of the Windsor Code is amended to read as follows:

Sec. 3-30. Definitions.

For the purpose of this article only, the following definitions shall apply.

Accessory use or structure: A use or structure on the same lot with, and of a nature customarily incidental and subordinate to, the principal use or structure.

Aquifer: An underground stratum of earth, gravel or porous stone that contains water.

Base flood: The flood having a one(1) percent chance of being equaled or exceeded in any given year, also referred to as the one hundred (100) year flood, as published by the Federal Emergency Management Agency (FEMA) as part of a Flood Insurance Study (FIS) and depicted on a Flood Insurance Rate Map (FIRM).

Base Flood Elevation (BFE): 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 riverine areas.

Basement: For the purposes of floodplain management, a basement is any area of the building having its floor subgrade (below ground level) on all sides.

Building: See Structure.

Building coverage: That percentage of the plot or lot area covered by the building area.

Cost: 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 be established by a detailed materials list (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 specification, 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.

Development: Any man-made change to improved or unimproved real estate, including, but not limited to the construction of buildings or other structures; the construction of additions, alterations or substantial improvements to buildings or structures; the placement of buildings or structures; mining, dredging, filling, paving, grading, excavating 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.

Federal Emergency Management Agency (FEMA): The federal agency that administers the National Flood Insurance Program (NFIP).

Finished living space: Finished living space can include, but is not limited to, a space that is 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.

Flood or flooding: A general and temporary condition of partial or complete inundation of normally dry land areas from:

- (1) The overflow of inland waters.
- (2) The unusual and rapid accumulation of runoff or surface waters from any source.

Flood Boundary and Floodway Map (FBFM): The official map of a community on which the Federal Emergency Management Agency (FEMA) has delineated the limits of the regulatory floodway and 100-year floodplain.

Flood fringe area: That area outside of the regulated floodway and within the limits of the base flood

Flood Insurance Rate Map (FIRM): The official map of the community on which the Federal Emergency Management Agency (FEMA) has delineated both the areas of special flood hazards (100-year floodplain) and the insurance and risk premium zones applicable to a community. FIRM published after January 1990 may also show the limits of the regulatory floodway.

Flood Insurance Study (FIS): The official study of a community in which the Federal Emergency Management Agency (FEMA) has conducted a technical engineering evaluation and determination of local flood hazards, flood profiles and water surface elevations. The Flood Insurance Rate Maps (FIRM), which accompany the FIS, provide both flood insurance rate zones and base flood elevations, and may provide the regulatory floodway limits.

Flood plain or flood-prone area: Any land area susceptible to being inundated by water from any source. (See definition of Flooding)

Flood plain management: The operation of an overall program of corrective and preventive measures for reducing flood damage, including, but not limited to, emergency preparedness.

Floodproofed: Watertight with walls substantially impermeable to the passage of water, and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy.

Floodproofing: Any combination of structural and nonstructural additions, changes, or adjustments to structures which reduces or eliminates flood damage to real estate or improved real property, water and sanitary facilities, structures or their contents.

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 one (1) foot. For the purposes of these regulations, the term "Regulatory Floodway" is synonymous in meaning with the term "Floodway".

Functionally dependent use or facility: 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.

High Adjacent Grade (HAG): 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: (a) Listed individually in the National Register of Historic Places (a listing is maintained by the Department of the Interior) or preliminarily selected 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; (c) Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary if 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.

Lowest floor: The lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usable solely for parking vehicles, building access or storage, in an area other than a basement area is not considered a building's lowest floor, provided that such an area meets the design requirements specified in section 3-41.

Manufactured (mobile) home: For the purposes of floodplain management, a manufactured home is a structure, transportable in one (1) or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when attached to the required utilities. The term also includes park trailers, travel trailers, recreational vehicles and other similar vehicles or transportable structures placed on a site for one hundred (180) consecutive days or longer and intended to be improved property.

Manufactured (mobile) home park or subdivision: For the purposes of floodplain management, a manufactured home park or subdivision is a parcel or contiguous parcels of land divided into two (2) or more manufactured home lots for rent or sale.

Market value: Market value of the structure shall be determined by the appraised property value as listed on the property's most recent tax assessment. A more recent independent appraisal by a professional appraiser may be used, however, such appraisal is the financial responsibility of the applicant and/or property owner.

Mean Sea Level (MSL): The North American Vertical Datum (NAVD) of 1988 or other datum, to which base flood elevations shown on a community's Flood Insurance Rate Map (FIRM) are referenced.

New construction: Structures for which the "start of construction" commenced on or after the effective date of this Ordinance. For the purposes of these regulations, replacement structures, as permitted by this Ordinance, are not considered "new construction".

Principal structure: A building in which is conducted the permitted use which is the main or principal use of the lot on which said building is located.

Recreational vehicle: For the purposes of floodplain management, a recreational vehicle is a vehicle which is: (a) built on a single chassis; (b) four hundred (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; and (d) designed primarily not for use as a permanent dwelling but as a temporary living quarters for recreational, camping, travel, or seasonal use.

Redevelopment: Any man-made change to improved real estate, other than single-family homes, including, but not limited to the removal of buildings or other structures; construction of buildings or other structures; the construction of additions, alterations or substantial improvements to buildings or structures; the placement of buildings or structures; mining, dredging, filling, paving, grading, excavation or drilling operations or storage of equipment; the storage, disposition, or extraction of materials; and the installation, repair or removal of public or private sewage disposal systems or water supply facilities.

Regulatory floodway: See Floodway.

Special Flood Hazard Area (SFHA): The land in the floodplain within a community subject to a one (1) percent or greater chance of flooding in any given year. SFHAs 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 Flood Insurance Rate Maps (FIRM) are only approximate (rounded up or down) and should be verified with the BFEs published in the FIS for a specific location. SHFAs include, but are not necessarily limited to, the land shown as Zones A, A1-30, AE, AO, AH, and the Coastal High Hazard Areas shown as Zones V, V1-30, and VE on a FIRM. The SHFA is also called the Area of Special Flood Hazard.

Start of construction: The first placement of permanent construction of a structure on a site, such as the pouring of slabs or footings, or any work beyond the stage of excavation. Permanent construction does not include land preparation, such as clearing, grading, and filling, 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 as part of the main structure. For a structure without a basement or poured footings, the "start of construction" includes the first permanent framing or assembly of the structure or any part thereof on its piling or foundation. 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.

Structure: For the purposes floodplain management, "structure" means a walled or roofed building, including a gas or liquid storage tank, which is principally above ground. For the purposes of insurance coverage, "structure" means a walled and roofed building, other than a gas or liquid storage tank, which is principally above ground and affixed to a permanent site. For the latter purpose, the term includes a building while in the course of construction, alteration or repair, but does not include building materials or supplies intended for use in such construction, alteration or repair, unless such materials or supplies are within an enclosed building on the premises.

Substantial damage: Damage of <u>any</u> origin sustained by a structure, whereby the cost of restoring the structure to its pre-damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.

Substantial improvement: Any combination of repairs, reconstruction, rehabilitation, alterations, additions or other improvements to a structure, taking place during a twenty-five (25) year period, in which the cumulative cost equals or exceeds fifty (50) per cent of the market value of the structure as determined at the beginning of such twenty-five (25) year period. This term includes structures that have incurred "substantial damage", regardless of the actual repair work performed. For the purpose 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 either: (a) any project for improvement of a structure to comply with existing 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 (b) any alteration of a "historic" structure, provided that the alteration will not preclude the structure's continued designation as a "historic structure".

Variance: A grant of relief by the community from the terms of the floodplain management regulations.

Violation: Failure of a structure or other development to be fully compliant with the community's Floodplain Management Ordinance or any requirements or conditions of a permit. 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 to the Town Engineer.

Water Surface Elevation: The height, in relation to the National 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.

Sec. 3-31. Statement of purpose.

The purpose of this article is to promote public health, safety, and general welfare within the town, to minimize flood losses in floodway and flood fringe areas in the town, and to protect the aquifer within said areas by:

- (1) Restricting, prohibiting, or controlling uses, including, but not limited to, deposit, removal or storage of materials, construction of structures or buildings, and any other works which: (a) are dangerous to health, safety or property in times of flood, (b) cause increases in flood heights or velocities, or (c) are likely to pollute ground waters;
- (2) Requiring that permitted uses vulnerable to flood, including public facilities, shall be protected against flood damage at the time of initial construction, thereby reducing damage due to flooding and the need for investment in flood control projects;
- (3) Ensuring that potential buyers will have the opportunity of identifying land within the flood hazard area;
- (4) Minimizing surface and ground water pollution which will affect human, animal, or plant life;
- (5) Helping to maintain a stable tax base through the preservation of property values by reducing the potential of future flood blight areas;
- (6) Providing for public awareness of the potential for flooding and harm to the aquifer; and
- (7) Protecting the aquifer for use as a public water supply, by limiting the amount of impervious surface within the floodplain area, and reducing the effect of deicing salts, chemicals and other pollutants.

Sec. 3-32. Administration.

(1) Statutory Authorization

The Legislature of the State of Connecticut has in Title 7, Chapter 98, 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.

(2) Designation of the Local Administrator

The Town Engineer is hereby appointed on behalf of the Town of Windsor to administer and implement the provisions of this program.

The duties and responsibilities of the Town Engineer are as follows:

- (A) Review all permit applications for completeness, particularly in terms of the requirements of Section 3-39.
- (B) Review all permit applications to determine whether the proposed development and building sites will be reasonably safe from flooding.
- (C) Review all development permits to assure that the permit requirements of this Ordinance have been satisfied.
- (D) Review all permit applications to assure that all necessary federal or state permits have been received. Require that copies of such permits be provided and maintained on file with the permit application. Such permits include, but are not limited to, Stream Channel Encroachment Line (SCEL) Permit, Coastal Area Management (CAM) Permit, Water Diversion Permit, Dam Safety Permit, and Army Corps of Engineers 401 and 404 Permits.
- (E) Notify the regional planning agency and affected municipality at least thirty-five (35) days prior to a public hearing if any change of regulation or use of a flood zone will affect an area within five hundred (500) feet of another municipality.
- (F) Notify the adjacent communities and the Department of Environmental Protection (DEP), Inland Water Resources Division, prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Emergency Management Agency.
- (G) Assure that maintenance is provided within the altered or relocated portion of said watercourse so that the flood carrying capacity is not diminished.
- (H) Obtain, record and maintain the elevation (in relation to mean sea level) of the lowest floor (including basement) of all substantial improvements or repair to a structure that has sustained substantial damage.
- (I) Obtain, record and maintain the elevation (in relation to mean sea level) to which the substantial improvement or repair to a structure that has sustained substantial damage has been flood-proofed.
- (J) When flood-proofing is utilized for a particular structure, the Town Engineer shall obtain certification from a registered professional engineer or architect, in accordance with Section 3-42.
- (K) Where interpretation is needed as to the exact location of boundaries of the area of special flood hazard (e.g., where there appears to be a conflict between a mapped boundary and actual field conditions), the Town Engineer shall make the necessary interpretation. The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided for in this Ordinance.

- (L) Require the applicant to provide base flood elevation data for all proposed development, including manufactured home parks and subdivisions.
- (M) When base flood elevation data or floodway data have not been provided in accordance with Section 3-35 and Section 3-39, the Town Engineer 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 Section 3-42.
- (N) All records pertaining to the provisions of this Ordinance shall be obtained and maintained in the office of the Town Engineer.
- (O) Upon completion of permitted development and prior to issuance of a Certificate of Occupancy (CO), necessary as-built surveys (prepared by a Connecticut Licensed Professional as per Connecticut State Statutes) and engineering and architectural certifications shall be provided to the Town Engineer demonstrating compliance with the approved plans and standards set forth in Section 3-42.

(3) Certification

Where required under this Ordinance, a Connecticut registered professional engineer or architect shall certify that the design and methods of construction are in accordance with accepted standards of practice for meeting the provisions of this Ordinance. Such certification must be provided to the Town Engineer.

Sec. 3-33. Appeals.

- (1) Notice of the decision of the Town Engineer shall be sent by certified mail return receipt requested to the last known address of the applicant and published once in a newspaper of general circulation in Windsor and may be appealed by anyone aggrieved on a form provided by the Town Engineer to the Inland Wetlands and Watercourses Commission within seven (7) calendar days of the publication of said decision, the date of said decision being excluded in the calculation of said seven (7) days. Any such appeal shall not stay the decision of the Town Engineer, which shall remain in effect until such time as it may be overruled, modified, or otherwise changed by said commission.
- (2) Any decision of the Inland Wetlands and Watercourses Commission may be appealed to the Superior Court by any aggrieved party in the manner provided by statute for other appeals from the Inland Wetlands and Watercourses Commission, except that no appeal shall stay the decision of the Commission absent a decision of the Commission to that effect or a court order.

Sec. 3-34. Lands to which article applies.

This article shall apply to all Special Flood Hazard Areas (SFHA) within the Town of Windsor.

Sec. 3-35. Basis for establishing the areas of special flood hazard.

The SFHA identified by the Federal Emergency Management Agency (FEMA) in its Flood Insurance Study (FIS) for the Town of Windsor, Hartford County, dated effective September 26, 2008, and accompanying Flood Insurance Rate Maps (FIRM) and/or Flood Boundary and Floodway Maps (FBFM), dated effective September 26, 2008, and other supporting data, and any subsequent revision thereto, are 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 SFHA includes any area shown on the FIRM, dated effective September 26, 2008, as zones A, A1-A30, AE, AO, and AH, including areas designated as a floodway on a FIRM or FBFM. SFHAs 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 Flood Insurance Rate Maps (FIRM) are only approximate (rounded up or down) and should be verified with the BFEs established in the FIS for a specific location. Also included are areas of potential, demonstrable or historical flooding, including any area contiguous with, but outside of the SFHA identified by FEMA, and where the land surface elevation is lower than the BFE as shown in the FIS, and the area is not protected from flooding by a natural or man-made feature.

Sec. 3-36. Compliance.

No structure, land, or water shall hereafter be used, and no structure shall be located, extended, converted or structurally altered without full compliance with the terms of this article and other applicable regulations.

Sec. 3-37. Abrogation and greater restrictions.

This article shall not repeal, abrogate or impair any existing easements, covenants, or deed restrictions. However, where this article imposes greater restrictions, the provisions of this article shall prevail.

Sec. 3-38. Warning and disclaimer of liability

The degree of flood protection required by this article is considered reasonable for regulatory purposes, and is based on engineering and scientific methods of study. Larger floods may occur on rare occasions, or the flood height may be increased by man-made or natural causes, such as ice jams and bridge openings restricted by debris. These regulations do not imply that permitted uses within areas of special flood hazard will be free from flooding or flood damages. This article shall not create liability on the part of the town, or any commissioner, officer, or employee thereof, for any damages that may result from reliance on this article or any administrative decision lawfully made hereunder.

Sec. 3-39. Development permit.

A Floodplain Development Permit shall be required in conformance with the provisions of this Ordinance prior to the commencement of any development activities within any special flood hazard area established in Section 3-35. Permits issued under this Ordinance shall expire if actual construction of a permitted structure does not commence within one hundred and eighty (180) days of the permit approval date.

(1) Permit Application Procedures.

A Floodplain Development Permit is hereby established for all construction and other development to be undertaken in Special Flood Hazard Areas in this community. Prior to any development activities, application for a Floodplain Development Permit shall be made to the Town Engineer on forms provided and may include, but not be limited to, plans in duplicate drawn to scale showing, at a minimum, the property lines and location of the parcel; the nature, location, dimensions, and elevations of the area in question; limit and extent of the 100-year floodplain and/or floodway boundary and base flood elevation(s); existing and proposed structures, fill,

storage of materials, drainage facilities and the location of the foregoing. Specifically, the following information is required to be submitted to the Town Engineer:

(A) Application Stage

The applicant shall provide at least the following information, where applicable. Additional information may be required on the permit application form.

- (i) Base Flood Elevation (BFE) for the site in question as determined in the FEMA Flood Insurance Study (FIS) or Flood Insurance Rate Map (FIRM). The FIS flood profiles provide more accurate BFE data than the FIRM. The extent of the 100-year floodplain and floodway must be depicted with a boundary line on any site plans and shown in relation to existing and proposed structures or development;
- (ii) Elevation in relation to mean sea level of the proposed lowest floor, including basement, of all substantial improvements or repairs to structures that have sustained substantial damage;
- (iii) Elevation in relation to mean sea level to which any substantial improvements or repairs to structures that have sustained substantial damage will be dry flood-proofed;
- (iv) Description of the extent to which any watercourse will be altered or relocated as a result of the 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 materials required by the Federal Emergency Management Agency (FEMA) in order to officially amend or revise the Flood Insurance Rate Map. The applicant must also provide assurances that the conveyance capacity of the altered or relocated stream segment will be maintained;
- (v) A statement and supporting documentation (all costs of project, market value of structures, etc.) verifying that the proposed alterations to an existing structure meet or do not meet the criteria of the substantial improvement and/or substantial damage definition. If a development meets the definition of substantial improvement and/or substantial damage, the structure must be brought into compliance with all floodplain regulations as if it was new construction;
- (vi) Where applicable the following certifications by a Connecticut registered engineer or architect are required, and must be provided to the Town Engineer. The design and methods of construction must be certified to be in accordance with accepted standards of practice and with the provisions of Section 3-42;
- (a) Non-residential flood-proofing must meet the provisions of Section 3-42;
- (b) Fully enclosed areas below the base flood elevation (BFE) must meet the minimum design criteria in Section 3-42;
- (c) No (0.00 foot) increase in floodway water surface elevations is allowed. Any development in a floodway must meet the provisions of Section 3-42.
- (vii)Incremental Improvements. The area of the site covered by a proposed improvement, addition, or accessory structure, shall be no more than twenty-five (25) percent of the area of the site covered by the existing building or buildings of principal use, as long as the pertinent requirements of this Ordinance are met. The applicant for a permit to extend improvements, additions or accessory structures into the flood fringe areas may apply for approval for such extension in increments. In addition to the other requirements of Section 3-39, the applicant

shall provide a table as part of its special exception application containing the following baseline information:

- (a) The "baseline amount" which shall be the number of square feet in the area of the site covered by the footprints of the existing building or buildings of principal use at the time of the first special exception application under this subsection. Said "baseline amount" shall not include the square footage of any existing improvement, addition or accessory structure on the site that has previously been approved under this Ordinance as a special exception allowing such existing improvement, addition or accessory structure to extend into a flood fringe area.
- (b) The "maximum encroachment amount" which shall be and shall not exceed the number which is twenty-five (25) percent of the baseline amount at the date of the first development permit application.
- (c) The "proposed encroachment amount" which shall be the square footage of the proposed improvements, additions or accessory structures that are proposed to extend into the flood fringe area.
- (d) The "remaining maximum encroachment amount" which shall be the difference in square footage, if any, obtained by subtracting (c) from (b).

Thereafter, and so long as any amount of said remaining maximum encroachment amount exists, and the proposed extension meets all the other requirements of this Ordinance, the applicant may apply to use all or a portion of such remaining maximum encroachment amount, as it may be reduced from time to time, in connection with future improvements, additions or accessory structures.

(B) Construction Stage

Upon completion of the applicable portion of construction, the applicant shall provide verification to the Town Engineer of the following as is applicable:

- (i) Lowest floor elevation shall be verified for:
- (a) A structure in Zones A, AE, A1-A30, AO or AH is the top of the lowest floor (including basement);
- (b) A non-residential structure which has been dry flood-proofed is the elevation to which the flood-proofing is effective (Note: For insurance purposes, a dry flood-proofed, non-residential structure is rated based on the elevation of its lowest floor unless it is flood-proofed to one foot above the BFE).
- (ii) Deficiencies detected by the review of the above listed shall be corrected by the permit holder immediately and prior to further progressive work being permitted to proceed. Failure to submit the survey or failure to make said corrections required hereby shall be the cause to issue a stop-work order for the project.

Sec. 3-40. Prohibited uses.

The following uses shall be prohibited within the special flood hazard area:

- (1) Manufactured (Mobile) Homes.
- (2) New Construction.

Sec. 3-41. Permitted uses.

The following open space uses shall be permitted within the special flood hazard area, excluding the regulatory floodway, to the extent that they are not prohibited by any other ordinance or regulation, and provided they do not require structures, fill or storage of materials or equipment:

- (1) Agricultural uses such as: general farming, pasture, grazing, outdoor plant nurseries, horticulture, truck farming, forestry, sod farming, and wild crop harvesting.
- (2) Industrial or commercial parking areas for three (3) vehicles or less.
- (3) Private and public recreational uses such as: golf courses, open tennis courts, driving ranges, archery ranges, picnic grounds, boat launching ramps, swimming areas, parks, wildlife and nature preserves, game farms, fish hatcheries, shooting preserves, target ranges, trap and skeet ranges, hunting and fishing areas, hiking and horseback riding trails.
- (4) Residential uses such as: lawns, gardens, parking areas for three (3) vehicles or less, and play areas.

Sec. 3-42. Special exceptions.

There shall be no encroachment, including fill, substantial improvements, accessory structures, or other development within the adopted regulatory floodway as designated on the floodway map effective September 26, 2008, except for that which may be required for public works projects of the state, federal, or municipal government. In no case, however, will any such activity be allowed if an increase in flood levels within the community results.

Substantial improvements or additions to existing structures or accessory structures, or fill shall be permitted only as a special exception in the flood fringe areas, and when authorized by the Town Engineer, and shall conform to the provisions of these regulations, provided the following provisions for flood hazard reduction are met.

Prior to any development activities, application for a Floodplain Development Permit shall be made to the Town Engineer on forms provided and shall meet the requirements of Section 3-39.

(1) General Standards

In all Special Flood Hazard Areas (SFHAs) the following provisions are required:

- (A) Substantial improvements, additions, and accessory structures that have sustained substantial damage shall be constructed using methods and practices that minimize flood damage.
- (B) Substantial improvements, additions, and accessory structures that have sustained substantial damage shall be constructed with materials and utility equipment resistant to flood damage.
- (C) Substantial improvements and repairs to structures that have sustained substantial damage shall be anchored to prevent flotation, collapse or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy.
- (D) Substantial improvements and repair to structures that have sustained substantial damage cannot be constructed or located entirely or partially over water.

- (E) Electrical, heating, ventilation plumbing, air conditioning equipment, HVAC ductwork, and other service facilities, or any machinery or utility equipment or connections servicing a structure shall be elevated to or above the base flood elevation (BFE) to prevent water from entering or accumulating within the components during conditions of flooding. This includes, but is not limited to, furnaces, oil or propane tanks, air conditioners, heat pumps, hot water heaters, ventilation ductwork, washer and dryer hookups, electrical junction boxes, and circuit breaker boxes.
- (F) New and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system.
- (G) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the system and discharges from the system into flood waters.
- (H) On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding.
- (I) Above-ground storage tanks (oil, propane, etc.) that 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.
- (J) In any portion of a watercourse that is altered or relocated, the flood carrying capacity must be maintained. Notify adjacent communities and the Connecticut Department of Environmental Protection (DEP), Inland Water Resources Division prior to any alteration or relocation of a watercourse.
- (K) 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.
- (L) 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 that 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.
- (M) 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 or substantial improvements involving an increase in footprint to the structure, shall be compensated for by deepening and/or widening of the floodplain. Storage shall be provided onsite, unless easements have been gained from adjacent property owners; it 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 Town Engineer.

- (N) 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 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 storage or flood velocity.
- (O) In the event that elimination of a structure takes place, by reason of fire or other catastrophe, replacement with a structure of like kind and intended use will be allowed to the extent that the building coverage will not exceed one hundred twenty-five (125) per cent of the displaced building coverage, to the extent that they are not prohibited by any other ordinance or regulation, as long as all requirements of Section 3-39 and 3-42 are met.
- (2) Standards for Watercourses without Established Base Flood Elevations (Un-Numbered A Zone), Adopted Floodways and/or Flood Mapping
- (A) The Town Engineer shall require base flood elevation (BFE) data be provided with any application for substantial improvement, repair to structures which have sustained damage or other development in Zone A without a FEMA-published BFE (un-numbered A Zone). The Town Engineer shall obtain, review and reasonably utilize any BFE and floodway data available from a federal, state or other source, including data developed for subdivision proposals, as criteria for requiring that substantial improvements, repair to structures which have sustained substantial damage or other development in un-numbered A Zones on the community's Flood Insurance Rate Map (FIRM) meet the standards in Section 3-39 and Section 3-42.1. If no BFE can be determined, the lowest floor, including basement, must be elevated to two (2.0) feet above the highest adjacent grade next to the structure.
- (B) When BFEs have been determined within Zones A1-A30 and AE on the community's FIRM but a regulatory floodway has not been designated, the Town Engineer must require that no substantial improvements, repair to structures which have sustained substantial damage or other development, including fill, shall be permitted which will increase the water surface elevation of the base flood more than (1.0) foot at any point within the community when all existing and anticipated development is considered cumulatively with the proposed development.
- (C) The Town Engineer may request floodway data of an applicant for watercourses without FEMA-published floodways. When such data of an applicant or whenever such data is available from any other source (in response to the municipality's request or not), the community shall adopt a regulatory floodway based on the principle that the floodway must be able to convey the waters of the base flood without increasing the water surface elevation more than one (1.0) foot at any point within the community.
- (D) The Town Engineer shall obtain, review and reasonably utilize any BFE and floodway data available from a federal, state or other source, as criteria for requiring that substantial improvements, repair to structures which have sustained substantial damage or other development in any area of potential, demonstrable or historical flooding within the community meet the standards in Section 3-39 and Section 3-42.1.
- (3) Specific Standards
- (3.1) Construction Standards in Special Flood Hazard Areas (SFHA), Zones A, A1-A30, AE.

- (A) Residential Construction. All substantial improvements and repair to structures that have sustained substantial damage which are residential structures shall have the bottom of the lowest floor, including basement, elevated to or above the base flood elevation (BFE). Electrical, plumbing, machinery or other utility equipment that service the structure must be elevated to or above the BFE.
- (B) Non-Residential Construction. All substantial improvements and repair to structures that have sustained substantial damage which are commercial, industrial or non-residential structures shall have:
- (i) The bottom of the lowest floor, including basement, elevated to or above the base flood elevation (BFE); or
- (ii) In lieu of being elevated, non-residential structures may be dry flood-proofed to one (1.0) foot above the BFE provided that together with all attendant utilities and sanitary facilities the areas of the structure below the required elevation are watertight with walls substantially impermeable to the passage of water, and provided that such structures are composed of structural components having the capability of resisting hydrostatic ad hydrodynamic loads and the effects of buoyancy. A Connecticut 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 section. Such certification shall be provided to the Town Engineer on the FEMA Floodproofing Certificate, Form 81-65.
- (iii) Electrical, plumbing, machinery or other utility equipment that service the structure must be elevated to or above the BFE.
- (C) Fully Enclosed Areas Below the Base Flood Elevation of Elevated Buildings. All substantial improvements or repair of substantial damage to residential or non-residential structures that include fully enclosed areas formed by a foundation and other exterior walls below the base flood elevation (BFE) of an elevated building, shall be designed to preclude finished living space and be designed to allow for the entry and exit of flood waters to automatically equalize hydrostatic flood forces on exterior walls (wet flood-proofing). Designs for complying with this requirement must either be certified by a Connecticut registered professional engineer or architect, or meet the following minimum criteria listed in Sections (i)-(vii) below:
- (i) Provide a minimum of two (2) openings (hydraulic flood vents) having a total net area of not less than one square inch for every one square foot of enclosed area subject to flooding. These hydraulic openings must be located on at least two different walls. Only the area (square footage) that lies below the BFE can be used in the calculation of net area of vents required. If the structure has more than one enclosed area, openings must be installed in the exterior walls of each enclosed area so that flood waters can enter directly from the outside;
- (ii) The bottom of all openings shall be no higher than one (1.0) foot above grade. At least one side of the structure's fully enclosed area must be at or above grade. Fill placed around the foundation walls must be graded so that the elevation inside the enclosed area is equal to or higher than the adjacent outside elevation on at least one side of the building. The finished floor of the enclosed area shall be no lower than the bottom of the foundation openings. The foundation slab of a residential structure, including the slab of a crawlspace, must be set equal to the outside finished grade on at least one side of the building:
- (iii) The openings may be equipped with screens, louvers, valves or other coverings or devices provided they permit the automatic entry and exit of flood waters in both directions without any external influence or control such as human intervention, including the use of electrical and other non-automatic mechanical means. Other coverings may be designed and certified by an engineer registered in the State of Connecticut or approved by the Town Engineer;

- (iv) The area cannot be used as finished living space. Use of the enclosed area shall be the minimum necessary and shall only be used for the parking of vehicles, building access or limited storage. Access to the enclosed area shall be the minimum necessary to allow for the parking of vehicles (garage door) or limited storage of maintenance equipment used in connection with the premises (standard exterior door) or entry to living area (stairway or elevator). The enclosed area shall not be used for human habitation or partitioned into separate rooms;
- (v) All interior walls, floor, and ceiling materials located below the BFE shall be unfinished and resistant to flood damage;
- (vi) Electrical, plumbing, HVAC ductwork, machinery or other utility equipment and connections that service the structure (including, but not limited to, furnaces, oil or propane tanks, air conditioners, heat pumps, hot water heaters, ventilation, washers, dryer, electrical junction boxes, circuit breaker boxes and food freezers) are prohibited in the fully enclosed area, even if elevated above the BFE in the space, will subject the structure to increased flood insurance rates; and
- (vii)A residential building with a structurally attached garage having the floor slab below the BFE is considered an enclosed area below the BFE and must meet the standards of Section 3-42.3(i) (vi). A garage attached to a residential structure, constructed with the garage floor slab below the BFE, must be designed to allow for the automatic entry and exit of floodwaters in both directions. Flood openings or vents are required in the exterior walls of the garage or in the garage doors. Human intervention necessary to open garage doors when flooding occurs is not an acceptable means of meeting the openings requirements. In addition to the automatic entry of floodwaters, the areas of the garage below the BFE must be constructed with flood resistant materials. Garages attached to non-residential structures must also meet the aforementioned requirements or be dry flood-proofed as per the requirements of Section 3-42.3.1 B.
- (3.2) Recreational Vehicles (RVs).
- (A) Recreational vehicles placed on sites within a SFHA shall be (i) on the site for fewer than 180 consecutive days, AND (ii) be fully licensed and ready for highway use. 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.
- (3.3) Floodways.
- (A) Located within Special Flood Hazard Areas (SFHA) are areas designated as floodway on the community's Flood Insurance Rate Maps (FIRM) or Flood Boundary and Floodway Maps (FBFM). Since the floodway is an extremely hazardous area due to the velocity of flood waters which carry debris, potential projectiles and has erosion potential, no encroachments, including fill, substantial improvements, repairs to substantially damaged structures and other developments shall be permitted unless certification, with supporting technical data, by a Connecticut licensed professional engineer is provided demonstrating that encroachments shall not result in any (0.00 feet) 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. A permit may be given which allows encroachments resulting in an increase in base flood elevations provided the community first obtains a conditional floodway revision by meeting the requirements of 44 CFR Chapter 1, Subsection 65.12.
- (3.4) Standards for Development in Areas of Shallow Flooding (Zones AO and AH).

- (A) Located within the Special Flood Hazard Areas (SFHA) are areas designated as shallow flooding areas (AO and AH Zones). These areas have flood hazards associated with base flood depths of one (1.0) to three (3.0) feet where a clearly defined channel does not exist and where the path of flooding is unpredictable and indeterminate. In AO and AH zones, the following provisions apply:
- (i) For residential structures, all substantial improvements and repair to structures that have sustained substantial damage shall have the lowest floor, including basement, elevated to the depth number specified on the Flood Insurance Rate Map (FIRM), in feet, above the highest adjacent grade. If no depth number is specified, the lowest floor, including basement, shall be elevated, at least two (2.0) feet above the highest adjacent grade.
- (ii) For non-residential structures, all substantial improvements and repair to structures that have sustained substantial damage shall:
- (a) Have the lowest floor, including basement, elevated to the depth number specified on the Flood Insurance Rate Map (FIRM), in feet above the highest adjacent grade. If no depth number is specified, the lowest floor, including basement, shall be elevated at least two (2.0) feet above the highest adjacent grade; or
- (b) Together with attendant utility and sanitary facilities, be completely flood-proofed to or above the depth number, in feet, specified on the FIRM above the highest adjacent grade, or if no depth number is specified at least two (2) feet above the highest adjacent grade, so that any space below that level is watertight with walls substantially impermeable to the passage of water and with structural components having the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy. Designs for complying with this requirement must be certified by either a Connecticut licensed professional engineer or architect.
- (iii) On-site drainage for all proposed structures in AO and AH Zones located on slopes shall provide adequate drainage paths to guide flood waters around and away from such structures.

Sec. 3-43. Variances.

- (1) No variance will be granted for a principal structure and/or accessory structure after September 25, 1980, with the exception of the following specific situations:
- (A) New construction in support of public improvement projects of the state, federal, or municipal government.
- (B) Redevelopment projects in the flood fringe areas in support of public goals and objectives of state, federal, or municipal plans, including, but not limited to flood hazard mitigation; environmental remediation; elimination of blight conditions; brownfield redevelopment; transitoriented development; and neighborhood or village revitalization.
- (C) The reconstruction, rehabilitation, or restoration of structures listed in the National Registry of Historical Places, the State Inventory of Historic Places, or any locally-adopted historic district provided the reconstruction, rehabilitation or restoration will not result in the structure losing its historical designation.
 - Any applicant to whom a variance is granted shall be given written notice that the structure will be permitted to be built with the lowest floor elevation below the base flood elevation (BFE) and the elevation, and that the cost of flood insurance will be commensurate with the increased risk resulting from the lowest floor elevation.

- (2) Variances to this article allowing construction within the special flood hazard area shall not be issued if the granting of such variance would result in increased flood heights or velocities, increased or additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public, or conflict with existing local laws or ordinances.
- (3) If a variance is issued to construct a principal structure and/or accessory structure within the flood fringe area, construction standards described in Section 3-39 and 3-42 must be met.

If a variance is issued to construct a principal structure and/or accessory structure within the flood fringe area, increased premium rates for flood insurance will result as such construction within the flood fringe area increases risk to life and property.

(4) Applications for a variance shall be made to the Town Engineer, on forms provided by the Town Engineer, and all data supplied shall be certified to be substantially correct and a true representation of existing conditions by a professional engineer registered in the State of Connecticut.

Sec. 3-44. Enforcement.

- (1) Each Floodplain Development Permit shall authorize, as a condition of approval, the Town Engineer or designated agents to make regular inspections of the subject property. The Town Engineer or designated agents are also authorized to inspect any property in a Special Flood Hazard Area (SFHA) where it appears that violations of these regulations may be taking place.
- (2) If the Town Engineer finds that any person is undertaking any construction, substantial improvement, filling, or any other activity or maintaining a condition which in violation of these regulations, the Town Engineer shall:
- (A) Issue a written order by certified mail, return receipt requested or by state marshal or hand delivery to the subject property owner, ordering that the activity cease and ordering the property owner to either obtain a Floodplain Development Permit prior to continuing with the activity or, if appropriate, ordering that all violations and/or obstructions be removed from the Special Flood Hazard Area (SFHA) immediately. All property owners, their agents, contractors and lessees shall be jointly and severally responsible for any violation caused by their actions and shall be subject to service as aforesaid.
- (B) Notify the Building Official and request that any building permit(s) in force be revoked or suspended and that a stop work order be issued.
- (C) The Town Engineer may suspend or revoke a Floodplain Development Permit if it is found that the applicant has not complied with the terms, conditions or limitations set forth in the permit or has exceeded the scope of work as set forth in the application including application plans. Prior to revoking any permit, the Town Engineer shall issue notice to the permittee, personally or by certified mail, return receipt requested, setting forth the facts or conduct which warrants the intended action.
- (D) Failure to comply with any written order issued under this section shall be considered a violation of these regulations and is subject to the penalties described in Section 3-45.
- (E) In the event violations or obstructions are not promptly removed from the Special Flood Hazard Area (SFHA), the Town Engineer may cause such removal and remediation work to be performed utilizing bond money held in escrow pursuant to this Ordinance, or may direct

the Director of Public Works to cause such work to be done and to place a lien against the property.

(F) Any person subjected to enforcement action pursuant to this Ordinance, may appeal any requirement, decision, or determination of the Town Engineer to the Inlands Wetlands and Watercourses Commission, in accordance with Section 3-33 of this Ordinance. Such person shall provide such information as necessary including appropriate certifications from a registered professional engineer or architect in order to substantiate the claim that the requirement, decision, or determination of the Town Engineer was in error or unwarranted.

Sec. 3-45. Penalties for Violation

Violations of the provisions of this Ordinance or failure to comply with any requirements or conditions of any permit shall be subject to a fine of \$250.00. Each day that such violation continues shall constitute a separate offense under this Ordinance. Nothing herein contained shall prevent the Town of Windsor from taking such other lawful action as is necessary to prevent or remedy any violation and/or to effect the collection of any fines. If any such action is necessary, all costs of said action, including a reasonable attorney's fee incurred by the Town, shall be taxed to the violator. In addition to any other remedy the Town may have to effect collection, unpaid fines, court costs, attorney's fees and costs of remediation shall constitute a lien on the land which is the subject of the violation.

Sec. 3-46. Savings Clause

The enactment of this ordinance repealing specific sections of the prior ordinance as existing shall not operate as an abatement of any action or proceeding thereon now pending under or by the authority of said prior ordinance. All of said actions and proceedings are hereby ratified to be continued.

Sec. 3-47. Severability

All provisions of the Town Code in conflict herewith are hereby repealed and that if for any reason, any word, clause, paragraph, or section of this ordinance shall be held to make the same unconstitutional, this ordinance shall not hereby be invalidated and the remainder of the ordinance shall continue in effect. Any provision herein which is in conflict with the Connecticut General Statutes is hereby repealed, it being understood that said statutes shall take place over this ordinance.

Sec. 3-48. Effective Date

This ordinance shall become effective ten (10) days after publication in a newspaper having a substantial circulation in Windsor.

Sec. 3-49. Reserved.

APPROVED AS TO FORM:

Fown Attorney

ATTEST:	•
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Town/ ¢ lerk	
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DISTRIBUTED TO COUNCIL	8/4/08
PUBLIC HEARING ADVERTISED	8/15/08
PUBLIC HEARING	9/2/08
ADOPTED	9/2/08
ADVERTISED	9/5/08
EFFECTIVE DATE	9/15/08

Went before Town Council to be reapproved with corrected Chapter Number:

Distributed to Town Council	8/3/09
Public Hearing Advertised	8/709
Public Hearing	9/8/09
Adopted	9/8/09
Advertised	9/11/09
Effective Date	9/21/09