

**AT A SPECIAL TOWN MEETING HELD ON JUNE 3, 1991
AT THE PLAINFIELD TOWN HALL,
THE FOLLOWING ORDINANCE WAS ADOPTED:
ORDINANCE NO. 95
FLOOD PLAIN MANAGEMENT ORDINANCE**

To repeal Town Ordinance No. 55 entitled "ORDINANCE CONCERNING MEASURES FOR MINIMIZATION OF FLOOD DAMAGE" approved at a Town Meeting on January 30, 1975 and
the Town Ordinance No. 59 approved at a Town Meeting on May 23, 1977 and substitute
therefore
the following:

SECTION 1. STATUTORY AUTHORIZATION, FINDING OF FACT, PURPOSE AND OBJECTIVES

1.1 STATUTORY AUTHORIZATION: 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 Town Meeting of the Town of Plainfield, Connecticut, does ordain as follows:

1.2 FINDINGS OF FACT:

1. The flood hazard areas of the Town of Plainfield are subject to periodic inundation which results in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety and general welfare.
2. These flood losses are caused by the cumulative effect of obstructions in floodplains causing increases in flood heights and velocities, and by the occupancy in flood hazard area by uses vulnerable to flood or hazardous to other lands which are inadequately elevated, flood-proofed, or otherwise unprotected from flood damages.

1.3 STATEMENT OF PURPOSE: 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 by provisions designed to:

1. Restrict or prohibit uses which are dangerous to health, safety and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;
2. Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
3. Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accomodation of flood waters;

4. Control filling, grading, dredging and other development which may increase erosion or flood damage, and;
5. Prevent or regulate the construction of flood barriers which may increase flood hazards to other lands.

1.4 OBJECTIVES: The Objectives of this Ordinance are:

1. to protect human life and health;
2. to minimize expenditures of public money for costly flood control projects;
3. to minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
4. to minimize prolonged business interruptions;
5. to minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in floodplains;
6. to help maintain a stable tax base by providing for the sound use and development of flood prone areas in such manner as to minimize flood blight areas, and;
7. to provide public information to potential home buyers and developers.

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.

1. **"Addition (to an existing building)"** means any walled and roofed expansion to the perimeter of a building in which the addition is connected by a common load-bearing wall other than a fire wall. Any walled and roofed addition which is connected by a fire wall or is separated by independent perimeter load-bearing wall in new construction.
2. **"Apex"** means the point of highest elevation on an alluvial fan, which on undisturbed fans is generally the point where the major stream that formed the fan emerges from the mountain front.
3. **"Appeal"** means a request for a review of the building official interpretation of any provision of this Ordinance or a request for a variance.
4. **"Area of Special Flood Hazard"** is the land in the floodplain within a community subject to one percent or greater chance of flooding in any given year.
5. **"Base Flood"** means the flood having a one percent chance of being equaled or exceeded in any given year.
6. **"Basement"** means that portion of a building having its floor subgrade (below ground level) on all sides.
7. **"Board"** means the Flood and Erosion Control Board of the Town of Plainfield.
8. **"Breakaway Wall"** means a wall that is not part of the structural support of the building and is intended through its design and construction to collapse under specific lateral loading forces without causing damage to the elevated portion of the building or the supporting foundation system.
9. **"Building"** means any structure built for support, shelter, or enclosure for any occupancy or storage.

10. **"Development"** means any man-made change to improved or unimproved real estate, including, but not limited to, buildings or other structures, mining, dredging, filling, grading, paving, excavating, drilling operations, or storage of equipment or materials.
11. **"Elevated Building"** means a non-basement building built to have the lowest floor elevated above the ground level by means of fill, solid foundation perimeter walls, pilings, columns (posts and piers), shear walls, or breakaway walls.
12. **"Existing Manufactured Home Park or Subdivision"** means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including, at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed before the effective date of the floodplain management regulations adopted by the Town.
13. **"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 placing of concrete pads).
14. **"Flood"** or **"Flooding"** means a general and temporary condition of partial or complete inundation of normally dry land areas from:
 1. the overflow of inland water;
 2. the unusual and rapid accumulation or runoff of surface waters from any source.
15. **"Flood Boundary and Floodway Map"** means an official map of the Town, on which the Federal Emergency Management Agency depicted both the area of special flood hazard and the floodway, or a map which supersedes it.
16. **"Flood Insurance Rate Map (FIRM)"** means an official map of the Town, on which the Federal Emergency Management Agency has delineated both the areas of special flood hazard and the risk premium zones applicable to the Town, or a map which supersedes it.
17. **"Flood Insurance Study"** is the official report by the Federal Emergency Management Agency. The report contains flood profiles and the water surface elevation of the base flood.
18. **"Floodway"** means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot.
19. **"Floor"** means the top surface of an enclosed area in a building (including basement), i.e., top of slab in concrete slab construction or top of wood flooring in wood frame construction. The term does not include the floor of a garage used solely for parking vehicles.
20. **"Functionally Dependent Facility"** means a facility which cannot be used for its intended purpose unless it is located in close proximity to water, such as a docking or port facility necessary for the loading and unloading of cargo or passengers, shipbuilding, ship repair, or seafood processing facilities. The term does not include long-term storage, manufacture, sales, or service facilities.
21. **"Highest Adjacent Grade"** means the highest natural elevation of the ground surface, prior to construction, next to the proposed walls of a structure.
22. **"Historic Structure"** means any structure that is: (a) Listed individually in the National Register of Historic Places (a listing maintained by the Department of Interior) or

preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register; (b) Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district; (c) Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of the Interior; or (d) Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either: (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.

23. **"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.
24. **"Manufactured Home"** means a structure, transportable in one or more sections, which is built on a permanent chassis and is designed to be used with or without a permanent foundation when attached to the required utilities. The term "manufactured home" does not include a "recreational vehicle".
25. **"Manufactured Home Park or Subdivision"** means a parcel, or contiguous parcels, of land divided into two (2) or more manufactured home lots for rent or sale.
26. **"Mean Sea Level"** means, for purposes of the National Flood Insurance Program, the National Geodetic Vertical Datum (NGVD) of 1929 or other datum, to which base flood elevations shown on a community's Flood Insurance Rate Map are referenced.
27. **"National Geodetic Vertical Datum (NGVD)"** as corrected in 1929 is a vertical control used as a reference for establishing varying elevations within the floodplain.
28. **"New Construction"** means, for the purposes of determining insurance rates, structures for which the "start of construction" commenced on or after the effective date of the initial FIRM and includes any subsequent improvements to such structures. For floodplain management purposes, "new construction" means structures for which the "start of construction" commenced on or after the effective date of a floodplain management regulation adopted by the Town and includes any subsequent improvements to such structures.
29. **"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 placing of concrete pads) is completed on or after the effective date of floodplain management regulations adopted by the Town.
30. **"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 projections; (c) designed to be self-propelled or permanently towable by a light duty truck; and (d) designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.
31. **"Start of Construction"** (for other than new construction or substantial improvements under the Coastal Barrier Resources Act (P.L. 97-348)), includes substantial improvement, and means the date the building permit was issued, provided the actual

start of construction, repair, reconstruction, rehabilitation, addition or improvement was within 180 days of the permit date. The actual start means the first placement or permanent construction of a structure (including a manufactured home) on a site, such as the placing 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. 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. 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.

32. **"Structure"** means a walled and roofed building that is principally above ground, a home, a gas or liquid storage tank, or other man-made facilities or infrastructures.
33. **"Substantial Damage"** 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.
34. **"Substantial Improvement"** means any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds 50 percent of the market value (as determined by the cost approach to value) of the structure before the "start of construction" of the improvement. This term includes structures which have incurred "substantial damage", regardless of the actual repair work performed. The term does not, however, include either (1) any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications which have been identified by the local code enforcement officials and which are the minimum necessary to assure safe living conditions or (2) any alteration of a "historic structure", provided that the alteration will not preclude the structure's continued designation as a "historic structure".
35. **"Town"** or **"Community"** means the Town of Plainfield, Connecticut.
36. **"Variance"** is a grant of relief from the requirements of this Ordinance which permits construction in a manner otherwise prohibited by this Ordinance where specific enforcement would result in unnecessary hardship.
37. **"Water Surface Elevation"** means the height, in relation to the National Geodetic Vertical Datum (NGVD) of 1929, of floods of various magnitudes and frequencies in the floodplains of riverine areas.

SECTION 3. GENERAL PROVISIONS

3.1 LANDS TO WHICH THIS ORDINANCE APPLIES: This Ordinance shall apply to all areas of special flood hazard within the jurisdiction of the Town of Plainfield.

3.2 BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD HAZARD: The areas of special flood hazard identified by the Federal Emergency Management Agency in its scientific and engineering report entitled "The Flood Insurance Study for the Town of Plainfield, Windham County, Connecticut", dated June 17, 1991 with accompanying Flood Insurance Rate Maps and floodway maps is hereby adopted by reference and declared to be part of this

Ordinance. The Flood Insurance Study is on file at the office of the Plainfield Town Clerk, Plainfield Town Hall, 8 Community Avenue, Plainfield, Connecticut, 06374.

3.3 BASIS FOR ESTABLISHING BASE FLOOD ELEVATIONS AND FLOODWAY ELEVATIONS: For purposes of this Ordinance where base flood elevations and/or floodway elevations are required the following apply:

1. Where base flood elevations and floodway elevations have been determined by the Federal Emergency Management Agency per Section 3.2, those elevations shall be used.
2. Where base flood elevations and floodway elevations have not been determined by the Federal Emergency Management Agency per Section 3.2, the elevations as certified by the applicant's professional engineer in the development permit application and approved by the building official or at the discretion of the building official obtained per Section 4.3.1 (k) shall be used.

3.4 DEVELOPMENT PERMIT: A Development Permit shall be required in conformance with the provisions of this Ordinance prior to the commencement of any development activities.

3.5 COMPLIANCE: No structure or land shall hereafter be located, extended, converted, or structurally altered without full compliance with the terms of this Ordinance (including the obtaining of a Development Permit) and other applicable regulations.

3.6 ABROGATION GREATER RESTRICTIONS: This Ordinance is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this Ordinance and another conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

3.7 INTERPRETATION: In the interpretation and application of this Ordinance all provisions shall be: 1). considered as minimum requirements; 2). liberally construed in favor of the governing body, and; 3). deemed neither to limit nor repeal any other powers granted under state statutes.

3.8 WARNING AND DISCLAIMER OF LIABILITY: The degree of flood protection required by this Ordinance is considered reasonable for regulatory purposes and is based on scientific and 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 areas of special flood hazard or uses permitted within such areas will be free from flooding or flood damages. This Ordinance shall not create liability on the part of the Town of Plainfield or by any officer or employee thereof for any flood damages that result from reliance on this Ordinance or any administrative decision lawfully made thereunder.

3.9 ADDITIONAL PERMITS: Additional Federal, State, and/or local permit(s) may be required. The applicant is responsible for determining what permit(s) are required and obtaining such permits. Possible required permits include but are not limited to: Wetlands, Subdivision, Zoning, Building, State Department of Environmental Protection, U.S. Army Corps, Fisheries.

SECTION 4. ADMINISTRATION

4.1 DESIGNATION OF THE ORDINANCE ADMINISTRATOR: The building official is hereby appointed to administer and implement the provisions of this Ordinance.

4.2 PERMIT PROCEDURES: Application for a Development Permit shall be made to the building official on forms furnished by him or her prior to any development activities, and may include, but not be limited to plans in duplicate drawn to scale showing the nature, location, dimensions, and elevations of the area in question; existing or proposed structures, fill, storage of materials, drainage facilities and the location of the foregoing. Specifically, the following information is required:

1. Application Stage

- a. Elevation in relation to mean sea level of the proposed lowest floor (including basement) of all structures,
 - b. Elevation in relation to mean sea level to which any non-residential structure will be flood-proofed;
 - c. Description of the extent to which any watercourse will be altered or relocated;
 - d. A statement as to whether or not the proposed alterations to a existing structure meet the criteria of the substantial improvement definition;
 - e. A statement as to whether there will be a dry access to the structure during the 100-year storm event. The design and methods of construction must be certified by a registered engineer or architect to be in accordance with acceptable standards of practice;
 - f. Non-Residential Flood Proofing Details;
 - g. Information on enclosed areas below the base flood elevation;
 - h. Details of the proposed increase in floodway heights, if any. (Any development in a floodway must meet the provisions of Section 5.3.4);
 - i. Information on break away wall as specified in Section 5.3.3. (d);
 - j. Details of Structural Anchoring of all new construction or substantial improvement as specified in Section 5.3.1 (c);
 - k. A registered professional engineer or architect shall review and/or develop structural design specifications and plans for the design, specifications and plans for construction and shall certify that the design, specifications and plans for construction are in accordance with acceptable standards;
 - l. A fee in the amount of twenty dollars (\$20,00) shall be charged;
 - m. A statement on the Status of all Federal, State and Local Applications with regards to the project.
 - n. Site plan at scale 1"= 40' (or otherwise approved by building official).
 - o. Owners of proposed or existing Mobile Home Parks or Mobile Home Subdivisions within any Special Flood Hazard Area shall file with the Town's Director of Civil Preparedness, for approval, a copy of an evacuation plan indicating alternate vehicular access and escape routes.
2. Construction Stage: Upon completion of the applicable portion of construction, the applicant shall provide verification to the building official of the following elevation(s) as applicable in all special flood hazard zones:

- a. The top of the lowest floor (including basement) of all structures.
 - b. The elevation to which the flood-proofing is effective.
 - c. Critical elevations of hydraulic structures and conduits.
3. Building and Construction Approval: The application shall provide a statement from the Building Official that all aspects of the construction of the structure are in accordance with approved plans.
4. Deficiencies detected by the review of the Building Official shall be corrected by the permit holder immediately and prior to further work being permitted to proceed. Failure to comply with the approved plans shall be cause to issue a stop-work order for the project.

4.3 DUTIES AND RESPONSIBILITIES OF THE BUILDING OFFICIAL WITH RESPECT TO THIS ORDINANCE

1. Duties of the building official shall include, but not be limited to:
 - a. Review all permit applications to determine whether proposed building sites will be reasonably safe from flooding;
 - b. Review all development permits to assure that the permit requirements of this Ordinance have been satisfied;
 - c. When changes to this Ordinance are proposed or when uses or construction works are proposed in any special flood hazard areas within 500 feet of an adjacent municipality and a public hearing is required, the following shall be notified within 35 days prior to such public hearing:
 1. Council of Government/Regional Planning Agency.
 2. All adjoining municipalities within 500 feet.
 - d. Notify adjacent communities and the Department of Environmental Protection - Water Resources Unit prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Emergency Management Agency;
 - e. Assure that maintenance is provided by owner within the altered or relocated portion of said watercourse so that the flood carrying capacity is not diminished;
 - f. Record the elevation (in relation to mean sea level) to which the lowest floor (including basement) of all new or substantially improved structures are constructed;
 - g. Record the elevation (in relation to mean sea level) to which the new or substantially improved structures have been flood-proofed;
 - h. When flood-proofing is utilized for a particular structure the building official shall review certification provided by the applicants' registered professional engineer or architect.
 - i. Where interpretation is needed as to the exact location of boundaries of the areas of special flood hazard (for example, where there appears to be a conflict between a mapped boundary and actual field conditions) the building official 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 in this Ordinance;

- j. When base flood elevation data or floodway data have not been made available per Section 3.2 then the building official shall review and reasonably utilize at his discretion any base flood elevation and floodway data available from a Federal, State or other source in order to administer the provisions of Section 5;
- k. When base flood elevation data or floodway data have not been made available on the FIRM, the building official shall deem applications incomplete which do not contain base flood elevations or floodway data obtained from a Federal, State or other approved source, and;
- l. All records pertaining to the provisions of this Ordinance shall be maintained in the office of the building official.

4.4 DUTIES AND RESPONSIBILITIES OF ALL BOARDS AND COMMISSIONS OF THE TOWN OF PLAINFIELD WITH RESPECT TO THIS ORDINANCE: All official boards and commissions of the Town of Plainfield shall take into account flood and flood-related erosion hazards to the extent that they are known, in all official actions relating to land management and use.

SECTION 5. PROVISIONS FOR FLOOD HAZARD REDUCTION

5.1 GENERAL STANDARDS: In all areas of special flood hazard the following provisions are required:

1. New construction and substantial improvements shall be anchored to prevent flotation, collapse or lateral movement of the structure;
2. New construction and substantial improvements shall be constructed with materials resistant to flood damage;
3. New construction and substantial improvements shall be constructed by methods and practices that minimize flood damage;
4. Electrical, heating, ventilation, plumbing, air conditioning equipment, and other service facilities shall be designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding;
5. New and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood water;
6. New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood water;
7. On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding. Elevations of septic systems in areas of special flood hazards shall be as permitted by the stricter standards of the State Health Department or Local Health Department.
8. Manufactured Home(s)
 - a. All manufactured homes (including "mobile" homes placed on a site for 180 consecutive days or longer) to be placed or substantially improved shall be elevated so that the lowest floor is above the base flood elevation;

- b. It 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 hydrodynamic pressures, and impact from floating debris.
- c. It shall be designed by a Professional Engineer or Architect using methods and practices which minimize flood damage;
 - 1. Adequate water access and drainage should be provided;
 - 2. Foundation construction standards include, but are not limited to, posts, piling or columns. Continuous foundation walls shall be placed parallel to the flow of flood water;
- 9. Recreational Vehicles: Recreational vehicles shall meet the following requirements: either (i) be on the site for fewer than 180 consecutive days, (ii) be fully licensed and ready for highway use, or (iii) meet the permit requirements of manufactured homes regarding elevation and anchoring. 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;
- 10. In any portion of a watercourse which is altered or relocated the flood carrying capacity shall be maintained, and;
- 11. A structure already in compliance with the provisions of this Ordinance shall not be made non-compliant by any alteration, repair, reconstruction or improvement to the structure.

5.2 STANDARD FOR STREAM WITHOUT ESTABLISHED BASE FLOOD ELEVATIONS AND/OR FLOODWAYS

- 1. In Zone A, the building official shall obtain, review and reasonably utilize any base flood elevation and floodway data available or required from a Federal, State, applicant or other source at the discretion of the building official. The above base flood elevation and floodway data shall be used as criteria for requiring that new construction, substantial improvements, or other development in Zone A on the Community's FIRM meet the standards in Section 5.3, and Section 6.
- 2. The building official shall require (until a regulatory floodway is designated), that no new construction, substantial improvements, or other development (including fill) shall be permitted within special flood hazard Zones on the community's FIRM, unless it is determined by a Licensed Engineer that the cumulative effect of the proposed development, will not increase the water surface elevation of the base flood or floodway except by special permit as permitted by this Ordinance.
- 3. Until FEMA has established a floodway, the Town 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) foot at any point along the watercourse.

5.3 SPECIFIC STANDARDS

- 1. .In areas of special flood hazard (including AE and AH) where base flood elevation data have been provided, per Section 3.2, the following provisions are required:

- a. Residential Construction: New construction or substantial improvement of any residential structure shall have the lowest floor, including basement, elevated at least to one (1) foot above the base flood elevation.
 - b. Non-Residential Construction:
 1. New construction or substantial improvement of any commercial, industrial, or non-residential structure shall have the lowest floor, including basement, elevated at least to one (1) foot above the level of the base flood elevation; or
 2. In lieu of being elevated, structures together with all attendant utilities and sanitary facilities may be flood-proofed to the elevation specified in Section 5.3.1 (b(I)) provided that the area of the structure below the required elevation is watertight with structural components substantially impermeable to the passage of water and capable of resisting hydrostatic and hydrodynamic loads and the effects of buoyancy. A registered professional engineer or architect shall develop structural designs, 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. Such certification shall be provided to the building official for approval
 - c. Structural anchoring must be designed to resist flotation, collapse, and laterally movement due to the effect of wind and water loads acting simultaneously on all building components. The anchoring and support system shall be designed with wind and water loading values which equal or exceed the 100 year mean recurrence interval (one percent (1%) annual chance floods and winds).
2. In areas of special flood hazard where base flood elevations have NOT been determined per Section 3.2, the following provisions are required:
 - I. In AO Zones:
 - a. Residential Construction: New construction or substantial improvement of any residential structure shall have the lowest floor, including basement, elevated at the greater of two (2) feet or the distance of the depth of flood above the base flood elevation as determined per Section 3.3 (2).
 - b. Non-Residential Construction:
 1. New construction or substantial improvement of any commercial, industrial, or non-residential structure, shall have the lowest floor, including basement, elevated at the greater of two (2) feet or the distance of the depth of flood above the base flood elevation as determined per Section 3.2 (2);
 2. In lieu of being elevated, structures together with all attendant utilities and sanitary facilities may be flood proofed to the elevation specified in section 5.3.2 (I) (b(I)) provided that the area of the structure below the required elevation is watertight with structural components substantially impermeable to the passage of water and capable of resisting hydrostatic and hydrodynamic loads and the effects of buoyancy. A registered professional engineer or architect shall develop structural designs, 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 the subsection. Such certification shall be provided to the building official for approval.

II. In A Zones:

- a. Residential Construction: New construction or substantial improvement of any residential structure shall have the lowest floor, including basement, elevated at least two (2) feet above the base flood elevation as determined per Section 3.3.
- b. Non-Residential Construction:
 1. New construction or substantial improvement of any commercial, industrial, or non-residential structure, shall have the lowest floor, including basement, elevated at least two (2) feet above the level of the base flood elevation as determined per Section 3.3; or
 2. In lieu of being elevated, structures together with all attendant utilities and sanitary facilities may be flood proofed to the elevation specified in Section 5.3.2 (II) (b(1)) provided that the area of the structure below the required elevation is watertight with structural components substantially impermeable to the passage of water and capable of resisting hydrostatic and hydrodynamic loads and the effects of buoyancy. A registered professional engineer or architect shall develop structural designs, 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 the subsection. Such certification shall be provided to the building official for approval.
3. Elevated Buildings: 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 (and which are not basements) shall be designed to preclude finished living space and designed to allow for the entry and exit of floodwaters to automatically equalize hydrostatic and hydrodynamic flood forces on exterior walls.
 - a. Designs for complying with this requirement must either be certified by a professional engineer or architect and meet or exceed the following minimum criteria:
 1. Provide a minimum of two openings having a total net area of not less than one square foot of enclosed area subject to flooding;
 2. The bottom of all openings shall be no higher than one foot above grade, and;
 3. Openings may be equipped with screens, louvers, valves or other coverings or devices provided they permit the automatic flow of floodwaters in both directions.
 - b. Electrical, plumbing, and other utilities are prohibited below the base flood elevation, and;
 - c. Access to the enclosed area shall be the minimum necessary to allow for parking of vehicles (garage door) or limited storage of maintenance equipment used in

connection with the premises (standard exterior door) or entry to the living area (stairway or elevator).

- d. (1) Design strength of each wall shall not be less than 10 nor more than 20 pounds per square foot; or

(2) A registered professional engineer or architect shall certify that the design wall collapse would result from a water load less than that which would occur during the base flood event, and the elevated portion of the building and supporting foundation system shall not be subject to collapse, displacement, or any other structural damage due to the effects of wind and water loads action simultaneously on all building components during the base flood event. Maximum wind and water loading values to be used in this determination shall each have one percent (1 %) chance of being equalled or exceeded in any given year (100-year mean recurrence interval).

(3) The applicant shall provide a statement that if breakaway walls, lattice work or screening are utilized the resulting enclosed space shall not be designed to be used for human habitation, but shall be designed to be used only for parking of vehicles, building access, or limited storage of maintenance equipment used in connection with the premises.

(4) Plans for any structures that will have breakaway walls, lattice work or screening.

1. FLOODWAYS: Floodways are located within areas of special flood hazard on the community's Flood Insurance Rate Map (FIRM), or as may have been determined in Section 3.3 (2). As such, encroachments, including fill, new construction, substantial improvements and other developments are prohibited unless certification (with supporting technical data) by a registered professional engineer is provided demonstrating that encroachments shall result in no increase in flood levels during occurrence of the base flood discharge except as allowed by special permit in Section 8.

SECTION 6. STANDARD FOR DEVELOPMENT PROPOSALS: In all special flood hazard areas the following requirements shall apply:

6.1. All subdivision proposals shall be consistent with the need to minimize flood damage;

6.2. All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize damage by floods;

6.3. All subdivision proposals shall have adequate drainage and detention storage to reduce exposure to flood hazards, and;

6.4. In all special flood hazard areas, base flood elevation data shall be provided for subdivision proposals and other proposed development.

SECTION 7. VARIANCE AND APPEAL PROCEDURES

7.1. AUTHORITY TO GRANT VARIANCES: The Flood and Erosion Control Board as established by the Town of Plainfield shall hear and decide appeals and requests for variances from the requirements of this Ordinance.

7.2. The Flood and Erosion Control Board shall hear and decide appeals when it is alleged there is an error in any requirement, decision, or determination made by the building official in the enforcement or administration of this Ordinance.

7.3. Any person aggrieved by the decision of the Flood and Erosion Control Board or any person owning land which abuts or is within a distance of five hundred feet (500) or the length of the backwater curve, whichever is greater, of the land in question may appeal within 15 days after such decision to the State Superior Court.

7.4. Specific Situation Variances: No variance shall be issued if base flood elevation is proposed to be increased except if a special permit is granted per Section 8. Such special permit shall be obtained prior to the variance application.

1. Buildings on an Historic Register: Variances may be issued for the repair or rehabilitation of historic structures upon a determination that (i) the proposed repair or rehabilitation will not preclude the structure's continued designation as a historic structure and (ii) the variance is the minimum necessary to preserve the historic character and design of the structure in conformance with Sections 7.5.1 (a) - 7.5.1 (b).
2. Existing, Small Lot Location: Variances may be issued for new construction and substantial improvements to be erected on a lot of one-half acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, in conformance with Section 7.5.1 (a) - 7.5.1 (b).
3. Functionally Dependent Uses: Variances may be issued for new construction and substantial improvement and other development necessary for the conduct of a functionally dependent use provided the structure or other development is protected by methods that minimize flood damage, create no additional threat to public safety and meet the requirements of Section 7.5.1 (a) - 7.5.1 (b).

7.5. CONSIDERATION FOR GRANTING OF VARIANCES

1. Necessary Criteria For Variances
 - a. Variances shall only 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 so as not to destroy the historic character and design of the building.
 - b. Variances shall only be issued upon (i) a showing of good and sufficient cause, (ii) a determination that not granting the variance would result in exceptional hardship, and (iii) a determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public

expense, create nuisance, cause fraud or victimization of the public, or conflict with existing local laws or Ordinances.

2. In reviewing such application, the Flood and Erosion Control Board shall consider all technical evaluations, all relevant factors, all standards specified in other sections of this Ordinance, and
 - a. The danger that materials may be swept onto other lands to the injury of others;
 - b. The danger to life and property due to flooding or erosion damage;
 - c. The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
 - d. The importance of the services provided by the proposed facility to the community;
 - e. The necessity of the facility to water-front location, in the case of a functionally dependent facility;
 - f. The availability of alternative location, not subject to flooding or erosion damage, for the proposed use;
 - g. The compatibility of the proposed use with existing and anticipated development;
 - h. The relationship of the proposed use to the comprehensive plan and floodplain management program for that area;
 - i. The safety of access to the property in times of flood for ordinary and emergency vehicles;
 - j. The expected heights, velocity, duration, rate of rise and sediment transport of the flood waters, and the effects of the wave action, if applicable, expected at the site;
 - k. The cost of providing governmental services during and after flood conditions including maintenance and sewer, gas, electrical and water systems, and streets and bridges, and;
 - l. Affects on adjacent property.
 - m. Upon consideration of Sections 7.5.1 and 7.5.2, and the purposes of this Ordinance, the Flood and Erosion Control Board may attach such conditions to the granting of variances as it deems necessary to further the purposes of this Ordinance.

7.6. VARIANCE APPLICATION, FORMS AND REQUIREMENTS: The application, forms and requirements and their revised versions shall be as approved by the Flood and Erosion Control Board. These requirements, application and forms shall be available at the Planning and building official's office.

7.7. PUBLIC HEARING: A public hearing may be required as provided in Section 7.6 as determined by the Board.

7.8. ADMINISTRATIVE RESPONSIBILITIES

- a. Any applicant to whom a variance is granted shall be given written notice specifying the difference between the base flood elevation and 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 \$25.00 for \$100.00 of insurance coverage.

- b. The building official shall maintain the records of all appeal actions and report any variances to the Federal Emergency Management Agency upon request.

7.9. FEES FOR VARIANCE APPLICATIONS: Fees for variance applications shall be \$100.00. The Board may from time to time revise said fee.

SECTION 8. SPECIAL PERMIT

8.1. Intent: It is recognized that there are certain instances where flood elevation can be increased appropriately in Town if controlled as to area, location, or relationship to the neighborhood so as to promote or not adversely affect the public health, safety and general welfare. The following should also be considered:

1. severity of impact on upstream and downstream property owners.
2. adverse effects on existing structures.
3. lack of design and construction alternatives.

All such instances are considered to have special characteristics and accordingly each application must be carefully reviewed on a case by case basis. No special permits shall be issued for increases greater than 1 foot of the base elevation.

8.2. AUTHORITY TO GRANT SPECIAL PERMITS: The Flood and Erosion Control Board as established by the Town of Plainfield shall hear and decide on special permit application requests under this Ordinance.

Any person aggrieved by the decision of the Flood and Erosion Control Board or any person owning land which abuts or is within a distance of five hundred (500) feet or the length of the backwater curve, whichever is greater, of the land in question may appeal within 15 days after such decision to the State Superior Court.

8.3. SPECIAL PERMIT APPLICATION, REQUIREMENTS AND FORMS

- a. The requirements and application forms and their revised versions shall be as approved by the Flood and Erosion Control Board. These applications, requirements and forms shall be available at the building official's office.
- b. The applicant must use hydraulic and/or hydrologic methodologies which are used or recognized as acceptable by the Federal Emergency Management Agency (FEMA) for flood computations.

8.4. PUBLIC HEARING: A public hearing is required as set forth in Section 8.3.

8.5. FEES FOR SPECIAL PERMIT APPLICATIONS: Fees for special permits shall be \$250.00. The Board may from time to time revise said fee.

SECTION 9. PENALTIES FOR VIOLATION: Violation of the provisions of this Ordinance or failure to comply with any of its requirements, including violation of conditions and

safeguards established in connection with either grants of variance or special permits shall constitute a misdemeanor. Any person who violates this Ordinance or fails to comply with any of its requirements shall, upon conviction thereof, be fined not more than \$250.00 per day if proven done willfully and not more than \$100.00 per day if not, or imprisoned for not more than 10 days for each day of violation, or both, and in addition, shall pay all costs and reasonable legal fees involved in the case. Nothing herein contained shall prevent the Town of Plainfield from taking such other lawful action as is necessary to prevent or remedy any violation.

SECTION 10. VALIDITY

1. If any Section, subsection, clause or phrase of this Ordinance is, for any reason, found to be invalid by a Court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this Ordinance.
2. This Ordinance shall become effective 15 days after publication, as provided by law.

Dated at Plainfield, Connecticut, this 5th day of June 1991.

Patricial Carroll, C.C.M.C.
Town Clerk of Plainfield