BOROUGH OF FENWICK AN ORDINANCE CONCERNING FLOOD PLAIN MANAGEMENT REGULATIONS

Adopted August 30, 2012 Effective February 6, 2013, Amended Effective February 15, 2019

Pursuant to the authority granted to the Board of Warden and Burgesses in Section 20 of the Special Act Incorporating the Borough of Fenwick, as amended, and pursuant to the provisions of Chapter 124 and Chapter 476a of the Connecticut General Statutes, be it ordained:

The Borough of Fenwick hereby establishes the following regulations which shall be referred to as the Flood Plain Management Regulations of the Borough of Fenwick:

FLOOD PLAIN MANAGEMENT REQUIREMENTS

Flood hazard areas, as designated on the Federal Flood Insurance Rate Map for the Borough of Fenwick, are subject to periodic inundation which may result in loss of life and property, create health and safety hazards, and result in extraordinary public expenditures for flood protection and relief. these Regulations are designed to prevent or minimize the loss of life, injuries, and property damage, both private and public; to promote public health and safety; to help control and minimize the extent of floods; and to reduce the depth and violence of flooding, and attempt to parallel the requirements set forth by the State Residential Building Code and the FEMA Coastal Construction Manual. In the event of conflict, the most stringent requirements shall be applicable in the "Special Flood Hazard Areas".

1 Statutory Authorization, Finding of Fact, Purpose and Objectives

1.1 Statutory Authorization

The Legislature of the State of Connecticut has in Title 8, Chapter 124, Section 8-2 of the General Statutes authorized zoning commissions to adopt regulations designed to promote the public health, safety, and general welfare of the public, and more specifically, to secure safety from fire, panic, flood and other dangers. The Planning and Zoning Commission adopts the following regulations pursuant to that statutory authorization.

1.2 Findings of Fact

The flood hazard areas of the Borough of Fenwick are subject to periodic flood inundation which may result in the 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.

These flood losses are caused by the cumulative effect of obstructions in the floodplains causing increases in flood heights and velocities, and by the occupancy in flood hazard areas by uses vulnerable to floods or hazards to other lands that are inadequately elevated, floodproofed, or otherwise unprotected from flood damage. Uncontrolled development and use of the floodplains would adversely affect the community.

The Borough of Fenwick has voluntarily participated in the National Flood Insurance Program (NFIP) since *July 10, 1979*. The NFIP is founded on a mutual agreement between the federal government and each participating community. Local, state and federal

governments must share roles and responsibilities to meet the goals and objectives of the NFIP. The community's role is of paramount importance. Property owners are able to receive federally- subsidized flood insurance only if the community enacts and enforces the minimum floodplain regulations required for participation in the NFIP.

1.3 Statement of Purpose

It is the purpose of these Regulations to regulate floodplain development, promote public health, safety, and general welfare, and minimize public and private losses due to flood conditions in specific areas by provisions designed:

- a. To protect human life and health, and prevent damage to property;
- b. To minimize expenditure of public funds for costly flood control projects;
- **c**. To minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- d. To minimize prolonged business interruptions and other economic disruptions;
- **e**. To minimize damage to public facilities, infrastructure and utilities, such as water and gas mains, electric, telephone and sewer lines, and streets and bridges, located in the floodplain;
- **f**. To help maintain a stable tax base by providing for the sound use and development of flood hazard areas in such a manner as to minimize flood damage;
- g. To insure that potential buyers are notified that property is in a flood hazard area;
- h. To prevent increases in flood heights that could further increase flood damage;
- i. To ensure that those who occupy the flood hazard areas assume responsibility for their actions; and
- **j**. To discourage development in a floodplain if there is any practicable alternative to locate the activity, use or structure outside of the floodplain.

1.4 Objectives

In order to accomplish its purposes, these Regulations include objectives, methods and provisions that:

- **a**. Restrict or prohibit uses that are dangerous to health, safety and property due to flood or erosion hazards, or that result in damaging increases in erosion or in flood heights or velocities;
- **b**. Require that uses vulnerable to floods, including facilities that serve such uses, be protected against flood damage at the time of initial construction;
- c. Control the alteration of natural floodplains, stream channels, and natural

protective barriers that are involved in the accommodation of flood waters;

- **d**. Control filling, grading, dredging and other development that may increase erosion or flood damage; and
- **e**. Prevent or regulate the construction of barriers or obstructions that will unnaturally divert flood waters or that may increase flood hazards to other lands.

2 Definitions

Unless specifically defined below, words and phrases used in these Regulations shall have the same meaning as they have in common usage and to give these Regulations their most reasonable application. The following terms are defined for the purposes of these Regulations.

<u>Base Flood</u>: 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).

<u>Base Flood Elevation (BFE)</u>: The elevation of the crest of the base flood (100-year flood). The height in relation to mean sea level (NGVD of 1988) expected to be reached by the waters of the base flood at pertinent points in the floodplains of coastal and riverine areas.

Basement: Any building area having its floor sub-grade (below ground level) on all sides.

<u>Breakaway Walls</u>: A building 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 supporting foundation system.

<u>Building</u>: A walled and roofed structure that is principally above ground, including a manufactured home.

<u>Coastal AE Zone</u>: The portion of the Coastal High Hazard Area with wave heights between 1.5 feet and 3.0 feet during the base flood and seaward of the line labeled the "Limit of Moderate Wave Action" (LiMWA) on a Flood Insurance Rate Map (FIRM).

<u>Coastal High Hazard Area</u>: An area of special flood hazard extending from offshore to the inland limit of a primary frontal dune along an open coast and any other area subject to high velocity wave action from storms or seismic sources. Coastal High Hazard Areas are designated as Zones VE and Coastal AE on a Flood Insurance Rate Map (FIRM).

<u>Cost</u>: As related to substantial improvements, the cost of any reconstruction, rehabilitation, addition, alteration, repair or other improvement of a structure as established by a detailed written contractor's estimate. The estimate shall include, but not be limited to: the cost of materials (interior finishing elements, structural elements, utility and service equipment); sales tax on materials, building equipment and fixtures, including heating and air conditioning and utility meters; labor; built-in appliances; demolition and site preparation; repairs made to damaged parts of the building worked on at the same time; contractor's overhead; contractor's profit; and grand total. Items to be excluded include: cost of plans and specifications, survey costs, permit fees, outside improvements such as septic systems, water supply wells, landscaping, sidewalks, fences, yard lights, irrigation systems, and detached structures such as garages, sheds, and gazebos.

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

Existing Manufactured Home Park or Subdivision: A manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the homes are to be affixed (including, as a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) was completed before July 10, 1979, the effective date of the floodplain management regulations adopted by the Borough of Fenwick Planning and Zoning Commission.

<u>Expansion to an Existing Subdivision</u>: The preparation of additional sites by the construction of facilities for servicing the lots on which the homes are to be affixed (including the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads).

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

<u>Finished Living Space</u>: As related to fully enclosed areas below the base flood elevation (BFE) 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.

<u>Flood or Flooding</u>: A general and temporary condition of partial or complete inundation of normally dry land areas from either the overflow of inland or tidal waters, or the unusual and rapid accumulation or runoff of surface waters from any source.

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

Flood Insurance Study (FIS): The official study of the Borough of Fenwick 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 (FIRMs), which accompany the FIS, provide both flood insurance rate zones and base flood elevations, and may provide the regulatory floodway limits.

<u>Floodway</u>: 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 (1.0) foot. For the purposes of these Regulations, the term Regulatory Floodway is synonymous in meaning with the term Floodway.

<u>Functionally Dependent Use or Facility</u>: 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.

<u>Highest Adjacent Grade (HAG)</u>: 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 maintained by the Department of the Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register; (b) Certified or preliminarily determined by the Secretary of the Interior as contributing to the historic significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district; (c) Individually listed on a state inventory of historic places in states with historic preservation programs that 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.

<u>Limit of Moderate Wave Action (LiMWA)</u>: The landward limit of the 1.5 foot breaking wave within a Coastal AE Zone. These areas are seaward of the line labeled "Limit of Moderate Wave Action" (LiMWA) on a Flood Insurance Rate Map (FIRM).

<u>Lowest Floor</u>: The lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usable solely for parking of vehicles, building access or storage, in an area other than a basement area is not considered a building's lowest floor, provided that such an area meets the design requirements specified in these Regulations.5.3.1(c) of this regulation.

<u>Manufactured Home</u>: A structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when attached to the required utilities. The term manufactured home also includes park trailers, travel trailers, recreational vehicles and other similar vehicles placed on a site for greater than 180 consecutive days and intended to be improved property.

<u>Manufactured Home Park or Subdivision</u>: A parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.

<u>Market Value</u>: As related to substantial improvement and substantial damage, the market value of the structure as shall be determined by an independent appraisal by a professional appraiser or by the property's tax assessment minus land value prior to the start of the initial repair or improvement or, in the case of damage, the value of the structure prior to the damage occurring.

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

New Construction: Structures for which the start of construction commenced on or after July 10, 1979, the effective date of floodplain regulations, and includes any subsequent improvements to such structures.

<u>New Manufactured Home Park or Subdivision</u>: A manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to

be affixed (including at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed on or after the effective date, July 10, 1979, of the floodplain management regulation adopted by the community.

Recreational Vehicle: A vehicle which is: (a) built on a single chassis; (b) 400 square feet or less when measured at the largest horizontal projection; (c) designated to be self-propelled or permanently towable by a light duty truck; and (d) designed primarily not to be used as a permanent dwelling but as a temporary living quarters for recreational, camping, travel, or seasonal use.

<u>Sand Dunes</u>: Naturally occurring accumulations of sand in ridges or mounds landward of the beach.

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 Map (FIRM) are only approximate (rounded up or down) and should be verified with the BFEs published in the FIS for a specific location. SFHAs include, but are not necessarily limited to, the land shown as Zones A, AE, AO, AH, and the Coastal High Hazard Areas shown as Zones VE and Coastal AE on a FIRM. The SFHA is also called the Area of Special Flood Hazard.

Start of Construction: For other than new construction or substantial improvements under the Coastal Barrier Resources Act (P.L. 97-348), the term start of construction includes substantial improvement and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition placement, substantial improvement or other improvement was within one hundred and eighty (180) days of the permit date. The actual start means either the first placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation, or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations or the erections of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

<u>Structure</u>: A walled and roofed building which is principally above ground, including a manufactured home, a gas or liquid storage tank, or other man-made facilities or infrastructures.

<u>Substantial Damage</u>: 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.

<u>Substantial Improvement</u>: Any combination of repairs, reconstruction, rehabilitation, alterations, additions or other improvements to a structure, taking place during a ten (10) year period, in which the cumulative cost equals or exceeds fifty (50) percent of the market value of the structure as determined at the beginning of such ten (10) year period. This term includes structures that have incurred substantial damage, regardless of the actual repair work performed. For purposes of this definition, substantial improvement is considered to occur when the first alteration of any wall, ceiling, floor, or other structural part of the building commences, whether or not that alteration

affects the external dimensions of the structure. The term does not, however, include either: (1) Any project for improvement of a structure to correct existing violations of state or local health, sanitary, or safety code specifications that have been identified by the local code enforcement official and that 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.

<u>Variance</u>: A grant of relief by the Borough of Fenwick Zoning Board of Appeals from the terms of the floodplain management regulations that allows construction in a manner otherwise prohibited and where specific enforcement would result in unnecessary hardship.

<u>Violation</u>: Failure of a structure or other development to be fully compliant with the community floodplain management regulations. A structure or other development without required permits, lowest floor elevation documentation, flood-proofing certificates or required floodway encroachment calculations is presumed to be in violation until such time as that documentation is provided.

<u>Water Surface Elevation</u>: The height, in relation to the National Geodetic Vertical Datum (NGVD) of 1988, (or other datum, where specified) of floods of various magnitudes and frequencies in the flood plains of coastal or riverine areas.

3. General Provisions

3.1 Areas to Which This Regulation These Regulations Applies

These Regulations shall apply to all Special Flood Hazard Areas (SFHA) within the Borough of Fenwick, Connecticut.

3.2 Basis for Establishing the Special Flood Hazard Areas (SFHA)

The Special Flood Hazard Areas (SFHA) identified by the Federal Emergency Management Agency (FEMA) in its Flood Insurance Study (FIS) for the Borough of Fenwick, dated 02/06/2013, and accompanying Flood Insurance Rate Maps (FIRM), and other supporting data, and any subsequent revisions thereto, are adopted by reference and declared to be a part of this regulation. Since mapping is legally adopted by reference into these Regulations 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 as Zones AE, Coastal AE and VE, including areas designated as a floodway on a FIRM. Zones VE and Coastal AE are also identified as Coastal High Hazard Areas. SFHAs are determined utilizing the base flood elevations (BFE) provided on the flood profiles in the Flood Insurance Study (FIS) for the Borough of Fenwick. BFEs provided on a Flood Insurance Rate Map (FIRM) are only approximating (rounded up or down) and should be verified with the BFEs published in the FIS for a specific location. Also included in the SFHA are areas of potential, demonstrable or historical flooding, including any area contiguous with, but outside the SFHA identified by FEMA, and where the land surface elevation is lower than the base flood elevation (BFE) as shown in the FIS, and the where the area is not protected from flooding by a natural or man-made feature. The FIRM and FIS are on file in the Borough of Fenwick Office and are available on the FEMA website.

3.3 Structures Already In Compliance

A structure or development already in compliance with these Regulations shall not be made non-compliant by any alteration, modification, repair, reconstruction or improvement and must also comply with other applicable local, state, and federal regulations. No structure or land shall hereafter be located, extended, converted, modified or structurally altered without full compliance with the terms of these Regulations and other applicable regulations.

3.4 Abrogation and Greater Restrictions

These Regulations are not intended to repeal, abrogate or impair any existing ordinances, regulations, easements, covenants, or deed restrictions. However, where these Regulations imposes more stringent restrictions than any other ordinance, regulation easement, covenant or deed restriction, the provisions of these Regulations shall prevail.

3.5 Interpretation

In the interpretation and application of these Regulations, all provisions shall be: 1) considered as minimum requirements; 2) liberally construed to accomplish their protective, restrictive and to the extent appropriate, prohibitive purposes in order to protect the public health and safety, and; 3) deemed neither to limit nor repeal any other powers granted under State statutes.

3.6 Warning and Disclaimer of Liability

The degree of flood protection required by these Regulations is considered the minimum reasonable for regulatory purposes and is based on scientific and engineering considerations and research. Larger floods can and will occur on rare occasions. Flood heights may be increased by man-made or natural causes. These Regulations do not imply or guarantee that land outside the Special Flood Hazard Area or uses permitted in such areas will be free from flooding and flood damages. These Regulations shall not create liability on the part of the Borough of Fenwick or by any agency, commission, board, officer or employee thereof for any flood damages that result from reliance on these Regulations or any administrative decision lawfully made hereunder. The Borough of Fenwick, its agencies, commissions, boards, officers and employees shall assume no liability for another person's reliance on any maps, data or information provided by the Borough of Fenwick.

3.7 Severability

If any section, subsection, paragraph, sentence, clause, or phrase of these Regulations should be declared invalid for any reason whatsoever, such decision shall not affect the remaining portions of these Regulations, which shall remain in full force and effect; and to this end the provisions of these Regulations are hereby declared to be severable.

4. Administration

4.1 Designation of the Local Administrator

The Zoning Enforcement Officer is hereby appointed to administer, implement and enforce

the provisions of these Regulations.

4.2 Certification

Where required under these Regulations, a Connecticut licensed 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 these Regulations. Such certification must be provided, in writing to the Zoning Enforcement Officer.

4.3 Establishment of the Flood Management Section of the Zoning Permit

The flood management section of the Zoning Permit must be completed in conformance with the provisions of these Regulations prior to the commencement of any development activities. Permits issued pursuant to under these Regulations shall expire if actual construction of a permitted structure does not commence within one hundred and eighty (180) days of the permit approval date.

4.4 Permit Application Procedures

A Flood-Management Zoning Permit (which may be provided on a separate permit form or which may be combined with a standard Zoning Permit form) 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 Flood-Management Zoning Permit shall be made to the Zoning Enforcement Officer 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, the limit of moderate wave action (LiMWA) boundary line, and 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 Zoning Enforcement Officer:

4.4.1 Application Stage

The applicant shall provide at least the following information, where applicable. Additional information may be required on the Flood-Management Zoning Permit application form (which may be combined with a standard Zoning Permit application form).

- a. 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, limit of moderate wave action (LiMWA), and floodway must be depicted with a boundary line on any Site Plans and shown in relation to existing and proposed structures or development;
- **b**. Elevation in relation to mean sea level of the proposed lowest floor, including basement, of all new construction, substantial improvements or repairs to structures that have sustained substantial damage;
- c. Elevation in relation to mean sea level to which any non-residential new

construction, substantial improvements or repair to structures that have sustained substantial damage will be dry flood-proofed;

- d. 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 (FIRM). The applicant must pay any fees or other costs assessed by FEMA for this purpose. The applicant must also provide assurances that the conveyance capacity of the altered or relocated stream segment will be maintained:
- e. A statement and supporting documentation (all costs of project, market value of structure, etc.) verifying that the proposed alterations to an existing structure meets 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 were new construction;
- **f**. Where applicable, compliance with the following standards must be certified certifications by a Connecticut licensed professional engineer or architect, and such certifications must be provided to the Zoning Enforcement Officer. The design and methods of construction must be certified to be in accordance with accepted standards of practice and with the provisions of Section 5.3.
 - 1. Non-residential flood-proofing must meet the provisions of Section 5.3.1(b)2;
 - 2. Fully enclosed areas below the base flood elevation (BFE) must meet the minimum design criteria in Section 5.3.1(c);
 - **3**. No (0.00) increase in floodway water surface elevations are allowed. Any development in a floodway must meet the provisions of Section 5.3.3;
 - 4. Breakaway walls must meet the design criteria specified in Section 5.3.2; and
 - **5**. Structural anchoring must meet the design criteria specified in Section 5.1(c) and 5.3.2(d).

4.4.2 Construction Stage

Upon completion of the applicable portion of construction, the applicant shall provide verification to the Zoning Enforcement Officer of the elevation of the lowest floor:

- a. The lowest floor elevation for:
 - 1. A structure in Zones AE, is the top of the lowest floor (including

basement);

- **2**. A structure in Zones VE and Coastal AE, is the lowest horizontal structural member (excluding pilings or columns);
- **3**. A non-residential structure that 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.);
- **b**. 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 cause to issue a stop-work order for the project.

4.5 Duties and Responsibilities of the Local Administrator

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

- **a**. Review all Flood-Management Zoning Permit applications for completeness, particularly with the requirements of Section 4.4.
- **b**. Review all Zoning Permit applications to determine whether the proposed development and building sites will be reasonably safe from flooding.
- c. Review all Zoning Permit applications to assure that the permit requirements of these Regulations have been satisfied.
- d. Review all Zoning Permit applications to assure that all necessary federal and state permits have been received. Require that copies of such permits be provided and maintained on file with the permit application. Such permits may 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. If any change of regulation or use of a flood zone will affect an area within five hundred (500) feet of another municipality, notify the regional planning agency and affected municipality at least thirty-five (35) days prior to a public hearing.
- f. Notify the adjacent communities and the Department of Environmental Protection (DEP), Land and 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 new construction, substantial improvement 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 all new construction, 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 Zoning Enforcement Officer shall obtain certification from a licensed professional engineer or architect, in accordance with Section 5.3.1(b)2.
- **k**. Where interpretation is needed as to the exact location of boundaries of the special flood hazard area (for example, where there appears to be a conflict between a mapped boundary and actual field conditions) the Zoning Enforcement Officer shall make the necessary interpretation utilizing any data available to render a decision. The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in this regulation.
- I. Require the applicant to provide base flood elevation data for all proposed subdivisions.
- **m**. When base flood elevation data or floodway data have not been provided in accordance with Sections 3.2 and 4.4, the Zoning Enforcement Officer shall obtain, review and reasonably utilize any base flood elevation and floodway data available from a federal, state or other source in order to administer the provisions of this regulation.
- **n**. In Coastal High Hazard Areas (VE and Coastal AE Zones), certification shall be obtained from a Connecticut licensed professional engineer or architect that the structure is designed to be securely anchored to adequately anchored pilings or columns in order to withstand velocity waters and hurricane wave wash, in accordance with Section 5.3.2.
- **o**. In Coastal High Hazard Areas (VE and Coastal AE Zones), the Zoning Enforcement Officer shall review plans for adequacy of breakaway walls, in accordance with these Regulations.5.3.2.
- **p**. All records pertaining to the provisions of these Regulations shall be obtained and maintained in the office of the Zoning Enforcement Officer for public inspection.
- **q**. Upon completion of the 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 Zoning Enforcement Officer demonstrating compliance with the approved plans and standards set forth in Section 4.

5. Provisions for Flood Hazard Reduction

5.1 General Standards

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

- **a**. New construction, substantial improvements, and repairs to structures that have sustained substantial damage shall be constructed using methods and practices that minimize flood damage.
- **b**. New construction, substantial improvements, and repairs to structures that have sustained substantial damage shall be constructed with materials and utility equipment resistant to flood damage.
- c. New construction, substantial improvements, and repair to structures that have sustained substantial damage shall be constructed with materials and utility equipment that are flood-damage resistant and conform to the provisions of FEMA Technical Bulletin 2, Flood Damage-Resistant Material Requirements. This includes, but is not limited to, flooring, interior and exterior walls, wall coverings and other materials installed below the base flood elevation plus one (1.0) foot.
- **d**. New construction, 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.
- **e**. New construction, substantial improvements, and repairs to structures that have sustained substantial damage cannot be constructed or located entirely or partially over water.
- f. The bottom of all electrical, heating, plumbing, ventilation and air conditioning equipment, appliances, fixtures and components, HVAC duct work and duct systems, and any other utility service equipment, facilities, machinery, or connections servicing a structure shall be elevated one (1.0) foot above the base flood elevation (BFE). This includes, but is not limited to, furnaces, oil or propane tanks, air conditioners, heat pumps, hot water heaters, ventilation duct work, washer and dryer hook-ups, electrical junction boxes, and circuit breaker boxes. Systems, fixtures, equipment and components shall not be mounted on or penetrate through breakaway walls intended to fail under flood loads. Connections or other equipment that must be located below the BFE plus 1.0 foot elevation are permitted only when no other elevation alternative is available and provided they are designed and installed to prevent water from entering or accumulating within the components and to resist hydrostatic and hydrodynamic loads and stresses, including the effects of buoyancy, during the occurrence of the base flood event. Electrical wiring systems that must be located below the BFE plus 1.0 foot shall conform to the standards for wet locations.
- **g**. New and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system.
- **h**. 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.
- i. On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding.

- **j**. Above-ground storage tanks (oil, propane, etc.) which are located outside or inside of a building 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.
- k. In all flood zones, underground tanks shall be anchored to prevent flotation, collapse and lateral movement under conditions of the base flood. In VE and Coastal AE zones, above-ground storage tanks which are located outside or inside of a structure must be elevated one (1.0) foot above the base flood elevation (BFE). Where elevated on platforms, the platforms shall be cantilevered from or knee braced to the building or shall be supported on elevated foundations that conform to the standards for the particular flood zone as described in Section 5.3. In A and AE zones, above-ground storage tanks which are located outside or inside of a structure shall be elevated one (1.0) foot above the base flood elevation (BFE) or shall be securely anchored to prevent flotation, collapse or lateral movement under conditions of the base flood. Anchored tanks must have the top of the fill pipe located at least one (1.0) foot above the BFE and have a screw fill cap that does not allow for the infiltration of flood water.
- I. If any portion of a structure lies within the Special Flood Hazard Area (SFHA), the entire structure is considered to be located within the SFHA and must meet the construction requirements of the flood zone. The structure includes any structurally attached additions, garages, decks, porches, sunrooms, patios or any other structure attached to the main structure.
- m. 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., VE zone is more restrictive than AE zone; structure must be built to the highest BFE). The structure includes any structurally attached additions, garages, decks, porches, patios, sunrooms, or any other structure attached to the main structure.
- n. Compensatory Storage. The water holding capacity of the floodplain, except those areas that are tidally influenced, shall not be reduced. Any reduction caused by filling, new construction or substantial improvements involving an increase in footprint to the structure, shall be compensated for by deepening and/or widening of the floodplain. Storage shall be provided on-site, 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 municipality.
- o. Equal Conveyance. Within the floodplain, except those areas which are tidally influenced, as designated on the Flood Insurance Rate Map (FIRM) for the community, encroachments resulting from filling, new construction or substantial improvements involving an increase in footprint of the structure, are prohibited unless the applicant provides certification by a licensed professional engineer

demonstrating, with supporting hydrologic and hydraulic analyses performed in accordance with standard engineering practice, that such encroachments shall not result in any (0.00 feet) increase in flood levels (base flood elevation). Work within the floodplain and the land adjacent to the floodplain, including work to provide compensatory storage shall not be constructed in such a way so as to cause an increase in flood stage or flood velocity.

p. Manufactured Homes, Manufactured Home Parks and Subdivisions, and Recreational Vehicles are prohibited within the Borough of Fenwick.

5.2 Standards for Watercourses Without Established Base Flood Elevations Adopted Floodways, and/or Flood Mapping

- a. The Zoning Enforcement Officer shall require that base flood elevation (BFE) data be provided with any application for new construction, substantial improvement, repair to structures that have sustained substantial damage or other development in Zone A without a FEMA-published BFE (un-numbered A Zone). A registered professional engineer must determine the BFE in accordance with accepted hydrologic and hydraulic engineering practices and document the technical methods used. Studies, analyses and computations shall be submitted in sufficient detail to allow thorough review and approval. The Zoning Enforcement Officer 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 new construction, substantial improvements, repair to structures that have sustained substantial damage or other development in un-numbered A Zones on the community Flood Insurance Rate Map (FIRM) meet the standards in Section 5 and Section 5.3. If no BFE can be determined, the lowest floor, including basement, must be elevated to two (2) feet above the highest adjacent grade next to the structure.
- **b.** When BFEs have been determined within Zones AE on the community's FIRM but a regulatory floodway has not been designated, the Zoning Enforcement Officer must require that no new construction, substantial improvements, repair to structures that have sustained substantial damage or other development, including fill, shall be permitted that will increase the water surface elevation of the base flood more than one (1.0) foot at any point within the community when all existing and anticipated development is considered cumulatively with the proposed development.
- c. The Zoning Enforcement Officer may request that an applicant provide floodway data for watercourses without FEMA-published floodways. When such data are provided by an applicant or whenever such data are 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 Borough of Fenwick.
- **d**. The Zoning Enforcement Officer shall obtain, review and reasonably utilize any BFE and floodway data available from a federal, state or other source, as criteria for requiring that new construction, substantial improvements, repair to structures that have sustained substantial damage or other development in any area of

potential, demonstrable or historical flooding within the community meet the standards in Section 5 and Section 5.3.

e. Under the provisions of 44 CFR Chapter 1, Section 65.12, of the National Flood Insurance Program regulations, the Borough of Fenwick Planning and Zoning Commission a community may approve certain development in Zone AE, on the Borough's FIRM that increases the water surface elevation of the base flood by more than one (1.0) foot, provided that the community first completes all of the provisions required by Section 65.12.

5.3 Specific Standards

5.3.1 Construction Standards in Special Flood Hazard Areas (SFHA), Zone AE

a. Residential Construction

All new construction, 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 one (1.0) foot above the base flood elevation (BFE). Electrical, plumbing, machinery or other utility equipment that service the structure must be elevated one (1.0) foot above the BFE.

b. Non-Residential Construction

All new construction, substantial improvements, and repair to structures that have sustained substantial damage which are commercial, industrial or non-residential structures shall:

- 1. Have the bottom of the lowest floor, including basement, elevated one (1.0) foot above the base flood elevation (BFE); or
- 2. 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 and hydrodynamic loads and the effects of buoyancy. A registered professional engineer or architect shall review and/or develop structural design specifications and plans for the construction, and shall certify that the design and methods of construction are in accordance with acceptable standards of practice for meeting the provisions of this section. Such certification shall be provided to the Zoning Enforcement Officer on the FEMA Floodproofing Certificate, Form 81-65.
- 3. Electrical, plumbing, machinery or other utility equipment that service the structure must be elevated one (1.0) foot above the BFE.

c. Fully Enclosed Areas Below the Base Flood Elevation of Elevated Buildings

All new construction, substantial improvements, or repair to structures that have sustained substantial damage, whether residential or non-residential, that include fully enclosed areas formed by a foundation and other exterior walls shall have the lowest floor elevated to one

- (1.0) foot above the base flood elevation (BFE). The elevated building shall be designed to preclude finished living space below the lowest floor 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 registered professional engineer or architect as meeting the requirements of ASCE 24 Section 2.6.2.2, or meet the following minimum criteria listed in sections 1-8 below:
- 1. 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. The enclosed area is measured on the exterior of the enclosure walls. These hydraulic openings must be located on at least two different exterior walls of each enclosed area. 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;
- 2. The bottom of all openings shall be no higher than one (1.0) foot above the higher of either the final interior grade or floor elevation, or the finished exterior grade adjacent to the outside of the foundation wall. At least one entire 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;
- 3. 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. These coverings must not block or impede the automatic flow of floodwaters into and out of the enclosed area. Other coverings may be designed and certified by a registered professional engineer or approved by the Zoning Enforcement Officer;
- 4. Openings shall not be less than three (3) inches in any direction in the plane of the wall;
- 5. 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 the living area (stairway or elevator). The enclosed area shall not be used for human habitation;
- 6. All interior walls, floor, and ceiling materials located below one (1.0) foot above the BFE shall be unfinished and flood damage-resistant in accordance with FEMA Technical Bulletin 2, Flood Damage-Resistant Requirements.
- 7. Electrical, plumbing, HVAC duct work, 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, washer and

dryer hook-ups, electrical junction boxes, circuit breaker boxes and food freezers) are prohibited in the fully enclosed area below the BFE plus one (1.0) foot. Utilities or service equipment located in this enclosed area, even if elevated to one (1.0) foot above the BFE in the space, may subject the structure to increased flood insurance rates.

8. 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 Sections 5.3.1.3 (a)-(g). 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. Garage doors that must be manually opened do not meet the flood vent opening requirements in Section 5.3.1.3 (a)-(c). In addition to the automatic entry of floodwaters, the areas of the garage below BFE plus one (1.0) foot must be constructed with flood damage-resistant materials per the requirements of FEMA Technical Bulletin 2. Garages attached to non-residential structures must also meet the aforementioned requirements or be dry floodproofed as per the requirements of Section 5.3.1.b.

5.3.2 Construction Standards in Coastal High Hazard Areas, Zone VE and Coastal AE

Located within the Special Flood Hazard Areas (SFHA) are areas designated as Coastal High Hazard Areas. These areas have additional flood hazards associated with wave wash, erosion scour, and high wind. Therefore, the following provisions shall apply:

- **a**. All new construction, substantial improvement and repair to structures that have sustained substantial damage shall be located at least 25 feet landward of the reach of mean high tide.
- **b.** All new construction, substantial improvement and repair to structures that have sustained substantial damage shall be elevated so that the bottom of the lowest horizontal structural member (excluding pilings, pile caps, and columns) is elevated at least one (1.0 foot) above the base flood elevation (BFE), with all space below the lowest horizontal supporting member open and free of obstruction so as not to impede the flow of water. Basement floors that are below ground on all sides are prohibited.
- c. The bottom of all electrical, plumbing, machinery or other utility equipment that service the structure must be elevated one (1.0) foot above the BFE and cannot be located below the structure. Any service equipment that must be located below the BFE must be floodproofed to prevent water from entering during conditions of flooding. Electrical, mechanical and plumbing system components are not to be mounted on or penetrate through walls designed to breakaway under flood loads.
- **d**. All new construction, substantial improvement and repairs to structures that have sustained substantial damage shall be securely anchored on pilings or columns.
- e. All pilings and columns and the attached structures shall be anchored to resist flotation, collapse and lateral movement due to the effects 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 required by applicable State or local building codes.

- f. A Connecticut licensed professional engineer or architect shall develop structural specifications and plans for the construction and shall certify that the design, specifications and plans for construction are in accordance with acceptable standards and are in compliance with the provisions contained in Sections 5.3.2(a)-(d).
- g. There shall be no fill used for structural support. Minor grading and the placement of minor quantities of non-compacted fill shall be permitted for landscaping and drainage purposes under and around buildings, and for support of parking slabs, pool decks, patios and walkways installed at current grade. The fill must wash out from storm surge, thereby rendering the building free of obstruction, prior to generating excessive loading forces, ramping effects, or wave deflection. The Zoning Enforcement Officer shall approve design plans for landscaping/aesthetic fill only after the applicant has provided an analysis by a licensed professional engineer, architect and/or soil scientist, that demonstrates that the following factors have been fully considered: (1) Particle composition of fill material does not have a tendency for excessive natural compaction; (2) Volume and distribution of fill will not cause wave deflection to adjacent properties; and (3) Slope of fill will not cause wave run-up or ramping.
- **h**. There shall be no alteration of sand dunes that would increase potential flood damage.
- i. Prior to construction, plans for any structures that will have breakaway walls, lattice work or screening must be submitted to the Zoning Enforcement Officer for approval.
- j. Non-supporting breakaway walls, lattice work or mesh screening shall be allowed below the base flood elevation provided it is not part of the structural support of the structure and is designed so as to break away, under abnormally high tides or wave action, without damage to the structural integrity of the structure on which it is to be used and provided the following design specifications are met:
 - 1. Design safe loading resistance of each wall shall not be less than ten (10) pounds per square foot or more than twenty (20) pounds per square foot; or
 - 2. If more than twenty (20) pounds per square foot, a licensed 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 other structural damage due to the effects of wind and water loads acting simultaneously on all building components prior to or during the collapse of such wall. Enclosures

of 300 square feet or more are subject to increased insurance premiums.

- **k.** Areas enclosed by breakaway walls shall contain hydraulic flood vents per the requirements of Section 5.3.1.c.
- I. 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.
- **m**. Any alteration, repair, reconstruction, or improvement to a structure shall not enclose the space below the lowest floor except with breakaway walls, lattice work, or screening as provided for in Sections 5.3.2 (h) and 5.3.2 (i) of this section.

5.3.3 Floodways

Located within Special Flood Hazard Areas (SFHA) are areas designated as floodways 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 that carry debris and potential projectiles and has erosion potential, no encroachments, including fill, new construction, 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 published by FEMA. Buildings and structures meeting the standard above and located in whole or in part in the floodway shall be designed and constructed in accordance with ASCE 24. 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 increases in base flood elevations provided the community first obtains a conditional floodway revision by meeting the requirements of C.F.R. 44, Chapter 1, Subsection 65.12.

6 Design Standards for Subdivision Proposals

If a proposed subdivision is located in a Special Flood Hazard Area (SFHA) the following requirements shall apply:

- a. All subdivision proposals shall be consistent with the need to minimize flood damage;
- **b**. All subdivision proposals shall have public utilities and facilities such as sewer, gas, electrical and water systems located and constructed to minimize flood damage;
- **c**. All subdivision proposals shall have adequate drainage provided to reduce exposure to flood hazards; and
- **d**. In all special flood hazard areas where base flood elevation (BFE) data is not available,

the applicant shall provide a hydrologic and hydraulic engineering analysis performed by a Connecticut licensed professional engineer that generates BFEs for all subdivision proposals and other proposed development, including subdivisions. The Zoning Enforcement Officer shall require the applicant to provide BFE data for all subdivision proposals, as per Section 4.4.1.

7 Variance Procedures

7.3.7.1 Establishment of Variance Process

- **a**. The Borough of Fenwick Zoning Board of Appeals, as established by the Borough of Fenwick, shall hear and decide appeals and requests for variances from the requirements of these Regulations.
- **b**. The Borough of Fenwick Zoning Board of Appeals shall hear and decide appeals when it is alleged there is an error in any requirement, decision or determination made by the Zoning Enforcement Officer in the enforcement or administration of these Regulations.
- **c**. The Zoning Enforcement Officer shall maintain the records of all appeal actions and report any variances to the Federal Emergency Management Agency (FEMA) upon request.

7.2 Specific Variances

a. Functionally Dependent Use or Facility

Variances may be issued for new construction and substantial improvements and other development necessary for the conduct of a functionally dependent use or facility provided the structure or other developments is protected by methods that minimize flood damage, creates no additional threat to public safety and meet all the requirements of Section 7.3.

b. Floodway Prohibition

Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result.

7.3 Considerations for Granting of Variances

In reviewing such applications for variances, the Borough of Fenwick Zoning Board of Appeals shall consider all technical evaluations, all relevant factors, all standards specified in other sections of these Regulations and the items listed below as 7.3(a) through 7.3(k).

Upon consideration of these factors and the purposes of these Regulations, the Zoning Board of Appeals may attach such conditions to the granting of variances as it deems necessary to further the purposes of this regulation.

- **a**. The danger that materials may be swept onto lands causing injury to 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 waterfront location, in the case of a functionally dependent facility;
- **f**. The availability of alternative locations 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 safe access to the property in times of flood for ordinary and emergency vehicles;
- **j**. The heights, velocity, duration, rate of rise and sediment transport of the flood waters and the effects of wave action, if applicable, expected at the site; and
- **k**. The costs of providing governmental services during and after flood conditions including maintenance and repair of public utilities and facilities such as sewer, gas, electrical and water systems, and streets and bridges.

7.4 Conditions for Variances

a. Variances of requirements under these Regulations shall only be used upon a determination that the variance is the minimum necessary to afford relief considering the flood hazard; and in the instance of a historical building, a determination that the variance is the minimum necessary as not to destroy the historic character and design of the building and result in the loss of historic designation of the building.

Variances pertain to a piece of property and are not personal in nature. A properly issued variance is granted for a parcel of property with physical characteristics so unusual that complying with the regulation would create an exceptional hardship to the applicant or the surrounding property owners.

Those characteristics must be unique to that property and not be shared by adjacent parcels. For example, economic or financial hardship is not sufficient cause for a variance, nor are inconvenience, aesthetic considerations, physical handicaps, personal preferences or disapproval of one's neighbors.

- **b**. Variances shall only be granted upon:
 - (i) a showing of good and sufficient cause,

- (ii) a determination that failure to grant 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, creation of nuisance, damage to the rights or property values of other persons in the area, fraud or victimization of the public, or conflict with existing local laws, ordinances or regulations.

Only hardships that are based on unusual or unique physical characteristics of the property in question, characteristics that are not shared by adjacent parcels, shall qualify to meet subsection (ii) above. Claims of hardship based on the structure, on economic gain or loss, or on personal or self-created circumstances are not sufficient cause for the granting of a variance.

- c. No variance may be issued within a regulatory floodway that will result in any increase in the 100-year flood levels. A variance may be issued for new construction, substantial improvements and other development necessary for the conduct of a functionally dependent use provided that there is good and sufficient cause for providing relief; and the variance does not cause a rise in the 100-year flood level within a regulatory floodway. The structure and other development must be protected by methods that minimize flood damages.
- **d**. 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 reduced lowest floor elevation.

8. Enforcement

- **a**. Each Flood Management Zoning Permit shall authorize, as a condition of approval, the Zoning Enforcement Officer or designated agents to make regular inspections of the subject property. The Zoning Enforcement Officer 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.
- **b**. If the Zoning Enforcement Officer finds that any person is undertaking any construction, substantial improvement, filling, or any other activity or maintaining a condition that is in violation of these Regulations, the Zoning Enforcement Officer shall:
 - (i) Issue a written order by certified mail, return receipt requested, to the subject property owner, ordering that the prohibited activity cease and ordering the property owner to either seek to obtain a Building/Zoning 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.
 - (ii) Notify the Borough of Fenwick Planning and Zoning Commission.

- c. The Zoning Enforcement Officer *may* suspend or revoke a Flood-Management 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 Zoning Enforcement Officer 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 9.
- e. In the event violations or obstructions are not promptly removed from the Special Flood Hazard Area (SFHA), the Zoning Enforcement Officer may cause such removal and remediation work to be performed utilizing bond money held in escrow pursuant to these Zoning Regulations, or may direct the Borough of Fenwick to cause such work to be done and to place a lien against the property.
- **f**. Any person subject to enforcement action pursuant to these Regulations may appeal any requirement, decision, or determination of the Zoning Enforcement Officer to the Borough of Fenwick Zoning Board of Appeals in accordance with Section 7.1 (b). Such person shall provide such information as necessary including appropriate certifications from a licensed professional engineer or architect in order to substantiate the claim that the requirement, decision, or determination of the Zoning Enforcement Officer was in error or unwarranted.
- g. Nothing contained herein shall prevent the owner of a residential dwelling, commercial or industrial building existing at the time of the adoption of these Regulations from repairing, replacing or restoring said building or the components thereof to substantially the same character and form as existed at the time of such adoption.

9. Penalties for Violation

Any violation of the provisions of this these Regulations or failure to comply with any of its requirements, including violation of conditions and safeguards established in connection with granting of permits or variances, shall subject the violator to such civil and criminal penalties as may be provided by state law. Nothing herein contained shall prevent the Borough of Fenwick from taking such lawful action as is necessary to prevent or remedy any violation.