

2016-233

AN ORDINANCE AMENDING SECTION X (BUILDING AND HOUSING) OF THE GENERAL ORDINANCES THE BOROUGH OF UNION BEACH TO AMEND CERTAIN PROVISIONS REGARDING FLOOD INSURANCE REGULATIONS AND FLOOD DAMAGE PREVENTION.

BE IT ORDAINED by the Borough Council of the Borough of Union Beach, County of Monmouth, and State of New Jersey that Section X (Building and Housing), Section 10-5 (The National Flood Insurance Regulations) of the General Ordinances of the Borough of Union Beach is hereby amended or supplemented as follows:

PURPOSE

The purpose of this ordinance is to amend or add certain provisions of the regulations regarding construction in flood hazard areas to adopt the Preliminary Flood Insurance Rate Map (Preliminary FIRM) and require the freeboard to be measured from the top of block or pile to the base flood elevation, advisory base flood elevation or preliminary base flood elevation whichever is greater and to enact changes to the Borough Flood Damage Prevention Ordinance

Section X (Building and Housing), Section 10-5 (The National Flood Insurance Regulations) of the General Ordinances of the Borough of Union Beach is hereby amended or supplemented as follows (new text is double underlined, text to be deleted is ~~struck through~~ and notations to the reader and changes in subparagraph designations either with or without changes to content are italicized):

SECTION 1

Section X (Building and Housing), Section 10-5 (The National Flood Insurance Regulations) shall be amended, as follows:

10-5 THE NATIONAL FLOOD INSURANCE REGULATIONS STATUTORY AUTHORIZATION, FINDINGS OF FACT, PURPOSE AND OBJECTIVES

10-5.1 Statutory Authorization. The Legislature of the State of New Jersey has in N.J.S.A. 40:48-1, et seq., delegated the responsibility to local governmental units to adopt regulations designed to promote public health, safety, and general welfare of its citizenry. Therefore, the Borough Council of the Borough of Union Beach, in the County of Monmouth, State of New Jersey does ordain as follows.

10-5.2 Findings of Fact.

- a. The flood hazard areas of the borough 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.
- b. These flood losses are caused by the cumulative effect of obstructions in areas of special flood hazards which increase flood heights and velocities, and when inadequately anchored, damage uses in other areas. Uses that are inadequately flood proofed, elevated or otherwise protected from flood damage also contribute to the flood loss.

10-5.3 Statement of Purpose. It is the purpose of this section 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:

- a. To protect human life and health;
- b. To minimize expenditure of public money for costly flood control projects;
- c. To minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- d. To minimize prolonged business interruptions;
- e. To minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets, and bridges located in areas of special flood hazard;
- f. To help maintain a stable tax base by providing for the second use and development of areas of special flood hazard so as to minimize future flood blight areas;
- g. To ensure that potential buyers are notified that property is in an area of special flood hazard; and
- h. To ensure that those who occupy the areas of special flood hazard assume responsibility for their actions.

10-5.4 Methods of Reducing Flood Losses.

In order to accomplish its purposes, this section includes methods and provisions for:

- a. Restricting or prohibiting uses which are dangerous to health, safety, and property due to water or erosion hazards, or which result in damaging increases in erosion or in flood heights or velocities;
- b. Requiring that uses vulnerable to floods including facilities which serve such uses, be protected against flood damage at the time of initial construction;
- c. Controlling the alteration of natural flood plains, stream channels, and natural protective barriers, which help accommodate or channel flood waters;
- d. Controlling filling, grading, dredging, and other development which may increase flood damage; and,
- e. Preventing or regulating the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards in other areas.

10-5.5 Definitions.

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

"Advisory Base Flood Elevation (ABFE)" means those elevations promulgated by the Federal Office of Emergency Management on December 12, 2012 which more accurately reflect the true 1% annual change flood hazard elevations as a result of a large storm event.

"Appeal" means a request for a review of the local administrator's interpretation of any provision of this section or a request for a variance.

"Area of shallow flooding" means a designated AO, AH, or VO zone on a community's Digital Flood Insurance Rate Map (DFIRM) or Preliminary Flood Insurance Rate Maps (PFIRM) with a one percent annual or greater chance of flooding to an average depth of one (1) to three (3) feet; where a clearly defined channel does not exist, where the path of flooding is unpredictable and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow.

"Area of special flood hazard" means the land in the flood plain within a community subject to a one percent or greater chance of flooding in any given year.

"Areas of special flood related erosion hazard" is the land within a community which is most likely to be subject to severe flood related erosion losses. After a detailed evaluation of the special flood related erosion hazard area will be designated a Zone E on the Flood Insurance Rate Map.

"Base flood" means the flood having a one percent chance of being equaled or exceeded in any given year.

"Basement" means any area of the building having its floor subgrade (below ground level) on all sides.

"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 supporting foundation system.

"Coastal high hazard area" means 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 including V, VE, AE and Coastal A Zones.

"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, excavation or drilling operations, or storage of equipment or materials located within the area of special flood hazard.

"Digital Flood Insurance Rate Map" (DFIRM) means the official map on which the Federal Insurance Administration has delineated both the areas of special flood hazards and the risk premium zones applicable to the community.

"Elevated building" means a non-basement building (i) built in the case of a building in a coastal high hazard area to have the bottom of the lowest horizontal structural member of the elevated floor, elevated above the ground level by means of piling, columns (posts and piers), or shear walls parallel to the flow of the water, and (ii) adequately anchored so as not to impair the structural integrity of the building during a flood up to the magnitude of the base flood. In an area of special flood hazard "elevated building" also includes a building elevated by means of fill or solid foundation perimeter walls with openings sufficient to facilitate the unimpeded movement of flood waters. In areas of coastal high hazard "elevated buildings" shall also include a building otherwise meeting the definition of "elevated building" even though the lower area is enclosed by means of breakaway walls.

"Erosion" means the process of the gradual wearing away of landmasses.

"Freeboard" means the vertical distance measured between the ~~lowest floor~~ top of the block or piles of a building for structures located in the Special Flood Hazard Area (or between the lowest horizontal structural member of the lowest floor for structures located in a Coastal High Hazard Area) and the Base Flood Elevation (BFE) ~~or~~ Advisory Base Flood Elevation (ABFE) or Preliminary Base Flood Elevation (PBFE) whichever is greater.

"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 or tidal waters and/or
2. The unusual and rapid accumulation or runoff of surface waters from any source.

"Flood Insurance Study" (FIS) means the official report in which the Federal Insurance Administration has provided flood profiles, as well as the Flood Insurance Rate Map(s) and the water surface elevation of the base flood. "Flood-related erosion" means the collapse or subsidence of land along the shore of a lake or other body of water as a result of undermining caused by waves or currents of water exceeding anticipated cyclical levels or suddenly caused by unusually high water level in a natural body of water, accompanied by a severe storm, or by unanticipated force of nature, such as a flash flood or an abnormal tidal surge, or by some similarly unusual and unforeseeable event which results in flooding.

"Flood plain management regulations" means zoning ordinances, subdivision regulations, building codes, health regulations, special purpose ordinances (such as a flood plain ordinance, grading ordinance and erosion control ordinance) and other applications of police power. The term describes such State or local regulations, in any combination thereof, which provide standards for the purpose of flood damage prevention and reduction.

"Highest adjacent grade" means the highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.

"Historic Structure" means any structure that is:

1. 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;
2. 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;

3. Individually listed on a State inventory of historic places in States with historic preservation programs which have been approved by the Secretary of the Interior; or
4. Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either:
 - (a) By an approved State program as determined by the Secretary of the Interior; or
 - (b) Directly by the Secretary of the Interior in States without approved programs.

"Lowest Floor" means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, useable solely for the parking of vehicles, building access or storage in an area other than a basement is not considered a building's lowest floor provided that such enclosure is not built so to render the structure in violation of other applicable non-elevation design requirements.

"Manufactured home" means a structure, transportable in one (1) or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when attached to the required utilities. The term "manufactured home" shall not include a "recreational vehicle".

"Manufactured home park or manufactured home subdivision" means a parcel (or contiguous parcels) of land divided into two (2) or more manufactured home lots for rent or sale.

"New construction" means structures for which the "start of construction" commenced on or after the effective date of a floodplain regulation adopted by a community and includes any subsequent improvements to such structures.

"New manufactured home park or subdivision" means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed on or after the effective date of the flood plain management regulations adopted by the municipality.

“Preliminary Base Flood Elevation PBFE” The elevation shown on the Preliminary Flood Insurance Rate Map (PFIRM) for Zones AE, AH, A1-30, or VE that indicates the water surface elevation resulting from a flood that has a 1-percent chance of occurring in any given year.

“Preliminary Flood Insurance Rate Maps (PFIRM)” means those elevations promulgated by the Federal Office of Emergency Management on January 31, 2015 which more accurately reflect the true 1% annual change flood hazard elevations as a result of a large storm event.

"Primary frontal dune" means a continuous or nearly continuous mound or ridge of sand with relatively steep seaward and landward slopes immediately landward and adjacent to the beach and subject to erosion and overtopping from high tides and waves from coastal storms. The inland limit of the primary frontal dune occurs at the point where there is a distinct change from the relatively steep slope to a relatively mild slope.

"Recreational vehicle" means a vehicle which is (a) built on a single chassis; (b) 400 square feet or less when measured at the longest 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.

"Sand dunes" means naturally occurring accumulations of sand in ridges or mounds landward of the beach.

"Start of Construction" for other than new construction or substantial improvements under the Coastal Barrier Resources Act (P.L. No. 97-348) includes substantial improvements and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, placement, or other improvement was within 180 days of the permit date. The actual start shall mean either the first placement of permanent construction of a structure on a site such as the pouring of a 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 erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

"Structure" means a walled and roofed building, a manufactured home, or a gas or liquid storage tank that is principally above ground.

"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.

"Substantial Improvement" shall mean any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which exceeds 50 percent of the market 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:

- (a) 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 officer and which are the minimum necessary to assure safe living conditions; or
- (b) Any alteration of a "historic structure", provided that the alteration will not preclude the structure's continued designation as a "historic structure".

"Variance" means a grant of relief from the requirements of this section which permits construction in a manner that would otherwise be prohibited by this section.

"Mobile Home." Mobile Homes are not permitted by Section XIII, "Land Use and Development Regulations Ordinance of the Borough of Union Beach, Monmouth County, New Jersey."

10-5.6 Lands to Which This Section Applies This section shall apply to all areas of special flood hazards within the jurisdiction of the Borough of Union Beach, Monmouth County, New Jersey.

10-5.7 Basis for Establishing the Areas of Special Flood Hazard. The areas of special flood hazard for the Borough of Union Beach, Community No. 340331, are identified and defined on the following documents prepared by the Federal Emergency Management Agency:

- a. A scientific and engineering report "Flood Insurance Study, Monmouth County, New Jersey (All Jurisdictions)" dated September 25, 2009.

- b. Flood Insurance Rate Map for Monmouth County, New Jersey (All Jurisdictions) as shown on Index and panel numbers 34025C0029F, 34025C0033F, 34025C0034F, 34025C0041F; whose effective date is September 25, 2009
- c. Advisory Base Flood Elevations (ABFE) promulgated on December 12, 2012 by the Federal Emergency Management Agency
- d. Preliminary Flood Insurance Rate Maps (PFIRM) promulgated on January 31, 2105 by the Federal Emergency Management Agency

The above documents and designations are hereby adopted and declared to be a part of this section. The Flood Insurance Study and maps are on file at Borough Hall, 650 Poole Avenue, Union Beach, New Jersey 07735.

10-5.8 Penalties for Noncompliance. No structure or land shall hereafter be constructed, located, extended, converted, or altered without full compliance with the terms of this section and other applicable regulations. Violation of the provisions of this section by failure to comply with any of its requirements (including violations of conditions and safeguards established in connection with conditions) shall constitute a misdemeanor. Any person who violates this section or fails to comply with any of its requirements shall upon conviction thereof be fined not more than five hundred (\$500.00) dollars or imprisoned for not more than 30 days, or both, for each violation, and in addition shall pay all costs and expenses involved in the case. Nothing herein contained shall prevent the borough from taking such other lawful action as is necessary to prevent or remedy any violation.

10-5.9 Abrogation and Greater Restrictions. This section is not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this section and other ordinance, easement, covenant, or deed restriction conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

10-5.10 Interpretation. In the interpretation and application of this section, all provisions shall be:

- a. Considered as minimum requirements;
- b. Liberally construed in favor of the governing body; and,
- c. Deemed neither to limit nor repeal any other powers granted under state statutes.

10-5.11 Warning and Disclaimer of Liability. The degree of flood protection required by this section is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by man-made or natural causes. This section does

not imply that land outside the area of special flood hazards or uses permitted within such areas will be free from flooding or flood damages. This section shall not create liability on the part of the borough, any officer or employee thereof or the federal insurance administration, for any flood damages that result from reliance on this section or any administrative decision lawfully made thereunder.

10-5.12 Establishment of Development Permit. A development permit shall be obtained before construction or development begins within any area of special flood hazard established in subsection 10-5.7. Application for a development permit shall be made on forms furnished by the construction official 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:

- a. Elevation in relation to mean sea level, of the lowest floor (including basement) of all structures;
- b. The Base Flood Elevation, Advisory Base Flood Elevation and/or Preliminary Base Flood Elevation made applicable to the subject property by this Ordinance.
- c. The freeboard provided as set forth in subsection 10-5.5 Definitions above.
- d. Elevation in relation to mean sea level to which any structure has been floodproofed.
- e. Certification by a registered professional engineer or architect that the floodproofing methods for any nonresidential structure meet the floodproofing criteria in subsection 10-5.17b; and,
- f. Description of the extent to which any watercourse will be altered or relocated as a result of proposed development.

10-5.13 Designation of the Local Administrator. The Construction Official or in his absence the code enforcement officer is hereby appointed as the local administrator to administer and implement this section by granting or denying development permit applications in accordance with its provisions.

10-5.14 Duties and Responsibilities of the Local Administrator of the Borough of Union Beach. Duties of the local administrator shall include, but not be limited to:

- a. Permit Review.
 1. Review all development permits to determine that the permit requirements of this section have been satisfied.
 2. Review all development permits to determine that all necessary permits have been obtained from those federal, state or local governmental agencies from which prior approval is required.
 3. Review all development permits to determine if the proposed development is located in the floodway.
 4. Review all development permits in the coastal high hazard area of the area of special flood hazard to determine if the proposed development alters vegetation or sand dunes so as to increase potential flood damage.
 5. Review plans for walls to be used to enclose space below the greater of the advisory base flood elevation, ~~or~~ base flood level or preliminary base flood elevation in accordance with subsection 10-5.18,b,4.
- b. Use of other Base Flood and Floodway Data. When base flood elevation, advisory base flood elevation, preliminary base flood elevation and/or floodway data has not been provided in accordance with subsection 10-5.7, "Basis for Establishing the Areas of Special Flood Hazard", the local administrator 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 subsection 10-5.17a "Specific Standards", Residential Construction, and 10-5.17b "Specific Standards", Nonresidential Construction.
- c. Information to be Obtained and Maintained.
 1. Obtain and record the actual elevation (in relation to mean sea level) of the lowest floor (including basement) of all new or substantially improved structures, and whether or not the structure contains a basement.
 2. For all new or substantially improved floodproofed structures:
 - (a) Verify and record the actual elevation (in relation to mean sea level); and
 - (b) Maintain the floodproofing certifications required in subsection 10-5.12e.

3. In coastal high hazard areas, certification shall be obtained from a registered professional engineer or architect that the provisions of subsection 10-5.18.b, 1 and 2 (a) and (b) are met.
 4. Maintain for public inspection all records pertaining to the provisions of this section.
- d. Alteration of Watercourses.
1. Notify adjacent communities and the New Jersey Department of Environmental Protection, Flood Control Section and the Land Use Regulation Program prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Insurance Administration.
 2. Require that maintenance is provided within the altered or relocated portion of said watercourse so the flood carrying capacity is not diminished.
- e. Interpretation of FIRM and/or PFIRM Boundaries. Make interpretations where needed, as to the exact location of the boundaries of the areas of special flood hazards (for example, where there appears to be a conflict between a mapped boundary and actual field conditions). The person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in subsection 10-5.15

10-5.15 Variance Procedure.

- a. Appeal Board.
(Editor's Note: The planning board as established by subsection 13-3.1 exercises the powers of the zoning board of adjustment.)
1. ~~The zoning board of adjustment~~ planning board as established by the Borough of Union Beach shall hear and decide appeals and requests for variances from the requirements of this section.
 2. ~~The zoning board of adjustment~~ planning board shall hear and decide appeals when it is alleged there is an error in any requirement, decision, or determination made by the local administrator in the enforcement or administration of this section.
 3. Those aggrieved by the decision of the ~~zoning board of adjustment~~ planning board, or any taxpayer, may appeal such decision to the mayor and council, as provided for in subsection 13-5.7 of the "Land

Use and Development Regulations Ordinance of the Borough of Union Beach” and from the Superior Court of New Jersey.

4. In passing upon such applications, the ~~zoning board of adjustment~~ planning board shall consider all technical evaluations, all relevant factors, standards specified in other sections of this section, 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 to the facility of a waterfront location, where applicable;
 - (f) The availability of alternative locations for the proposed use which are not subject to flooding or erosion damage;
 - (g) The compatibility of the proposed use with existing and anticipated development;
 - (h) The relationship of the proposed use to the comprehensive plan and flood plain management program of 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 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.
5. Upon consideration of the factors of subsection 10-5.15a,4 and the purposes of this section, the ~~zoning board of adjustment~~ planning

board may attach such conditions to the granting of variances as it deems necessary to further the purposes of this section.

6. The local administrator shall maintain the records of all appeal actions, including technical information, and report any variances to the Federal Insurance Administration upon request.
- b. Conditions for Variances.
1. Generally, 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, ~~or~~ advisory base flood level or preliminary base flood level plus minimum required freeboard, providing items (a) through (k) in subsection 10-5.15a,4 have been fully considered. As the lot size increases beyond the one-half acre, the technical justification required for issuing the variance increases.
 2. Variances may be issued for the repair or rehabilitation of historic structures upon a determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as a historic structure and the variance is the minimum necessary to preserve the historic character and design of the structure.
 3. Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result.
 4. Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
 5. Variances shall only be issued upon:
 - (a) A showing of good and sufficient cause;
 - (b) A determination that failure to grant the variance would result in exceptional hardship to the applicant; and,
 - (c) A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public as identified in subsection 10-5.15a,4 or conflict with existing local laws or ordinances.

- c. Any applicant to whom a variance is granted shall be given written notice that the structure will be permitted to be built with a lowest floor elevation below the base flood elevation and that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation.

10-5.16 Provisions for Flood Hazard Reduction.

- a. General Standards. In all areas of special flood hazards the following standards are required:
 - 1. Anchoring.
 - (a) All new construction and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure.
 - (b) All manufactured homes shall be anchored to resist flotation, collapse or lateral movement. Methods of anchoring may include, but are not to be limited to, use of over-the-top or frame ties to ground anchors. This requirement is in addition to applicable State and local anchoring requirements for resisting wind forces.
 - 2. Construction Material and Methods.
 - (a) All new construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage.
 - (b) All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage.
 - 3. Utilities.
 - (a) All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the system;
 - (b) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharge from the systems into flood waters;

- (c) On-site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding; and
- (d) Electrical, heating, ventilation, plumbing and 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.

4. Subdivision Proposals.

- (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 damage; and,
- (d) Advisory base flood elevation, base flood elevation, and preliminary base flood elevation data shall be provided for subdivision proposals and other proposed development which contain at least fifty (50) lots or five (5) acres (whichever is less).

5. Enclosure Openings. For all new construction and substantial improvements having fully enclosed areas below the lowest floor that are usable solely for parking of vehicles, building access or storage in an area other than a basement and which are subject to flooding shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or must meet or exceed the following minimum criteria: A minimum of two (2) openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided. The bottom of all openings shall be no higher than one (1) foot above grade. Openings may be equipped with screens, louvers, or other covering or devices provided that they permit the automatic entry and exit of floodwaters.

10-5.17 Specific Standards. In all areas of special flood hazards where base flood elevation, ~~or~~ the advisory base flood elevations, or preliminary base flood elevation, data have been provided as set forth in subsection 10-5.7, "Basis for Establishing the Areas of

Special Flood Hazard” or in subsection 10-5.14b, “Use of Other Base Flood Data”, the following standards are required:

- a. Residential Construction.
 1. New construction and substantial improvement of any residential structure shall have the lowest floor, including basement together with the attendant utilities and sanitary facilities including all mechanicals elevated to or above the greater of the base flood elevation, ~~or~~ the advisory base flood elevations or preliminary base flood elevation, plus a minimum of two (2) feet of freeboard as set forth in subsection 10-5.5 Definitions;
 2. Within any AO zone on the Borough of Union Beach’s FIRM or PFIRM or the advisory base flood elevation or preliminary base flood elevation data that all new construction and substantial improvement of any residential structure shall have the bottom of the lowest horizontal structural member of the lowest floor, including basement, elevated at least two (2) feet above the highest adjacent grade at least as high as the depth number specified in feet (at least two feet if no depth number is specified) as set forth in subsection 10-5.5 Definitions. And, require adequate drainage paths around structures on slopes to guide floodwaters around and away from proposed structures.
- b. Nonresidential Construction. In an area of Special Flood Hazard , all new construction and substantial improvement of any commercial, industrial or other nonresidential structure shall:
 1. Either
 - (a) Have the bottom of the lowest horizontal structural member of the lowest floor, including basement, together with the attendant utilities and sanitary facilities including all mechanicals, elevated to the level of the greater of the base flood elevation, ~~or~~ the advisory base flood elevations or preliminary base flood elevation, plus a minimum of two (2) feet of freeboard as set forth in subsection 10-5.5 Definitions; and
 - (b) Within any AO zone on the municipality's FIRM or PFIRM or the advisory base flood elevation or preliminary base flood elevation data that all new Construction and substantial improvement of any commercial, industrial or other nonresidential structure shall either have the bottom of the lowest horizontal structural member of the lowest floor, including basement, elevated at least two (2) feet above the highest adjacent grade at least as high as the depth

~~number specified in feet (at least two feet if no depth number is specified)~~ as set forth in subsection 10-5.5 Definitions. And, require adequate drainage paths around structures on slopes to guide floodwaters around and away from proposed structures;

2. Or

- (a) Be floodproofed so that below the greater of the base flood elevation, ~~or~~ the ABFE or preliminary base flood elevation plus a minimum of two (2) feet of freeboard as forth in subsection 10-5.14c.2., the structure is watertight with walls substantially impermeable to the passage of water;
- (b) Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy; and,
- (c) Be certified by a registered professional engineer or architect that the design and methods of construction are in accordance with accepted standards of practice for meeting the applicable provisions of this subsection. Such certification shall be provided to the official as set forth in subsection 10-5.14c.2.

c. Manufactured Homes.

- 1. Manufactured homes shall be anchored in accordance with subsection 10-5.16a,1.
- 2. All manufactured homes to be placed or substantially improved within an area of special flood hazard shall be elevated on a permanent foundation such that the bottom of the lowest horizontal structural member of the of the lowest floor is at or above the greater of the base flood elevation, ~~or~~ the advisory base flood elevations or preliminary base flood elevation, plus a minimum of two (2) feet of freeboard as set forth in subsection 10-5.5, Definitions.

10-5.18 Coastal High Hazard Area. Coastal high hazard areas (V or VE, AE and Coastal A Zones) are located within the areas of special flood hazard established in subsection 10-5.7. These areas have special flood hazards associated with high velocity waters from tidal surges and hurricane wave wash; therefore, the following provisions shall apply:

a. Location of Structures.

- 1. All buildings or structures shall be located landward of the reach of the mean high tide.

2. The placement of manufactured homes shall be prohibited, except in an existing manufactured home park or manufactured home subdivision.
- b. Construction Methods.
1. Elevation. All new construction and substantial improvements shall be elevated on piling or columns so that the bottom of the lowest horizontal structural member of the lowest floor (excluding the piling or columns) is elevated to or above the greater of the base flood elevation, ~~or~~ the ABFE or the PBFE base flood level, plus a minimum of two (2) feet of freeboard as set forth in subsection 10-5.5, Definition, with all space below the lowest floor's supporting member open so as not to impede the flow of water, except for breakaway walls as provided for in subsection 10-5.18b,4(b).
 2. Structural Support
 - (a) All new construction and substantial improvements shall be securely anchored on piling or columns.
 - (b) The pile or column foundation and structure attached thereto shall be anchored to resist flotation, collapse or lateral movement due to the effects of wind and water loading values each of which shall have a one percent chance of being equaled or exceeded in any given year (100-year mean recurrence interval).
 - (c) There shall be no fill used for structural support.
 3. Certification. A registered professional engineer or architect shall develop or review the structural design specifications and plans for the construction and shall certify that the design and methods of construction to be used are in accordance with accepted standards of practice for compliance with the provisions of subsections 10-5.18b,1 and 10-5.18b,2 (a) and (b).
 4. Space below the Lowest Floor.
 - (a) Any alteration, repair, reconstruction or improvement to a structure started after the enactment of this section shall not enclose the space below the lowest floor unless breakaway walls, open wood lattice-work or insect screening are used as provided for in this section.

(b) Breakaway walls, open wood lattice-work or insect screening shall be allowed below the base flood elevation provided that they are intended to collapse under wind and water loads without causing collapse, displacement or other structural damage to the elevated portion of the building or supporting foundation system. Breakaway walls shall be designed for a safe loading resistance of not less than ten and no more than 20 pounds per square foot. Use of breakaway walls which exceed a design safe loading of 20 pounds per square foot (either by design or when so required by local or state codes) may be permitted only if a registered professional engineer or architect certifies that the designs proposed meet the following conditions.

(1) Breakaway wall collapse shall result from a water load less than that which would occur during the base flood:
and

(2) 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 load acting simultaneously on all building components (structural and non-structural). Water loading values used shall be those associated with the base flood. Wind loading values used shall be those required by applicable State or local building standards.

(c) If breakaway walls are utilized, such enclosed space shall be used solely for parking of vehicles, building access, or storage and not for human habitation.

(d) Prior to construction, plans for any breakaway wall must be submitted to the construction official for approval.

c. Sand Dunes. There shall be no man-made alteration of sand dunes, within Zones VE and V on community's DFIRM or PFIRM, which would increase potential flood damage.

SECTION 2

If any section, subsection, clause, or phrase of this ordinance is held to be unconstitutional or invalid for any reason, such decision shall not affect the remaining portions of this ordinance. All ordinances or parts of ordinances inconsistent with this ordinance are hereby repealed to the extent of such inconsistency.

SECTION 3

The Municipal Clerk is hereby directed, upon adoption of the Ordinance after public hearing thereon, to publish notice of the passage thereof and to file a copy of this Ordinance as finally adopted with the Monmouth County Planning Board as required by N.J.S.40:55D-16. The Clerk shall also forthwith transmit a copy of this Ordinance after final passage to the Borough Tax Assessor as required by N.J.S. 40:49-2.1.

SECTION 4

This Ordinance shall take effect immediately upon final passage and publication according to law and filing with the Monmouth County Planning Board.

Introduced: March _____, 2016

Passed and Approved: _____, 2016

I hereby approve of the
passing of this ordinance.

Paul Smith
Mayor

Attest:

Anne Marie Friscia
Municipal Clerk

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