

ORDINANCE # 2013-39-OA

**AN ORDINANCE OF THE TOWNSHIP OF BERKELEY,
COUNTY OF OCEAN, STATE OF NEW JERSEY AMENDING
THE TOWNSHIP CODE OF THE TOWNSHIP OF BERKELEY,
AMEND SO AS TO AMEND VARIOUS SECTIONS OF
CHAPTER XXIX, ENTITLED "FLOOD DAMAGE
PREVENTION"**

July 8, 2013

BE IT ORDAINED by the Mayor and Township Council of the Township of Berkeley, County of Ocean, and State of New Jersey, as follows:

SECTION 1. The Township Code of the Township of Berkeley is hereby amended and supplemented so as to amend Chapter 29, entitled "Flood Damage Prevention" so as to amend Section 29-2, entitled "Definitions", which shall now read as follows:

§29-2 DEFINITIONS

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

Advisory Base Flood Elevation (ABFE) —The elevation shown on a community's Advisory Flood Hazard Map that indicates the advisory stillwater elevation plus wave effect ($ABFE = SWEL + \text{wave effect}$) resulting from a flood that has a 1-percent or greater chance of being equaled or exceeded in any given year.

Advisory Flood Hazard Area (AFHA) —The land in the floodplain within a community subject to flooding from the 1% annual chance event depicted on the Advisory Flood Hazard Map.

Advisory Flood Hazard Map - The official map on which the Federal Emergency Management Administration has delineated the areas of advisory flood hazards applicable to the community.

Appeal — A request for a review of the Zoning Officer's interpretation of any provision of this ordinance or a request for a variance.

Area of Shallow Flooding — A designated AO, AH, or VO zone on a community's Digital Flood Insurance Rate Map (DFIRM) with a one percent annual or greater chance of flooding to an average depth of one to three 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 — The land in the floodplain within a community subject to a one percent or greater chance of flooding in any given year. **It is shown on the FIRM as Zone V, VE, V1-30, A, AO, A1-A30, AE, A99, or AH.**

Base Flood — The flood having a one percent chance of being equaled or exceeded in any given year.

Base Flood Elevation (BFE) – The flood elevation shown on a published Flood Insurance Study (FIS) including the Flood Insurance Rate Map (FIRM). For zones AE, AH, AO, and A1-A30, the elevation represents the water surface elevation resulting from a flood that has a 1-percent or greater chance of being equaled or exceeded in any given year. For zones VE and V1-30 the elevation represents the stillwater elevation (SWEL) plus wave effect (BFE=SWEL + wave effect) resulting from a flood that has a 1-percent or greater chance of being equaled or exceeded in any given year.

Basement — Any area of the building having its floor subgrade (below ground level) on all sides.

Best Available Flood Hazard Data – The most recent available flood risk guidance FEMA has provided. The Best Available Flood Hazard Data may be depicted on but not limited to Advisory Flood Hazard Area Maps, Work Maps or Preliminary FIS and FIRM.

Best Available Flood Hazard Data Elevation – The most recent available flood elevation FEMA has provided. The Best Available Flood Hazard Data Elevation may be depicted on an Advisory Flood Hazard Area Map; Work Map; or Preliminary FIS and FIRM.

Breakaway Wall — 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 — 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.

Development — 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) — 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 — A non-basement building (i) built, in the case of a building in an Area of Special Flood Hazard, to have the top of the elevated floor or, 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 base flood elevation 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" also includes a building otherwise meeting the definition of "elevated building" even though the lower area is enclosed by means of breakaway walls.

Erosion — The process of the gradual wearing away of land masses.

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 manufactured homes are to be affixed (including, at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed before the effective date of the floodplain management regulations adopted by a community.

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

- A. The overflow of inland or tidal waters and/or
- B. The unusual and rapid accumulation or runoff of surface waters from any source.

Flood Insurance Rate Map (FIRM) — 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.

Flood Insurance Study (FIS) — 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.

Floodplain Management Regulations — Zoning ordinances, subdivision regulations, building codes, health regulations, special purpose ordinances (such as a floodplain 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.

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

Floodway — The channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than 0.2 foot.

Highest Adjacent Grade — 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 Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;
- B. Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;
- C. Individually listed on a State inventory of historic places in States with historic preservation programs which have been approved by the Secretary of the Interior; or
- D. Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either:
 - (1) By an approved State program as determined by the Secretary of the Interior; or
 - (2) Directly by the Secretary of the Interior in States without approved programs.

Lowest Floor — 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 **of CFR Section 60.3.**

Manufactured Home — 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" does not include a "recreational vehicle".

Manufactured Home Park or Manufactured Home Subdivision — A parcel (or contiguous parcels) of land divided into two (2) or more manufactured home lots for rent or sale.

New Construction — 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 — 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 floodplain management regulations adopted by the municipality.

Preliminary Flood Insurance Rate Map (FIRM) – the draft version of the FIRM released for public comment before finalization and adoption.

Primary Frontal Dune — 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 — A vehicle which is [i] built on a single chassis; [ii] 400 square feet or less when measured at the longest horizontal projections; [iii] designed to be self-propelled or permanently towable by a light duty truck; and [iv] designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

Sand Dunes — Naturally occurring **or man-made** 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 means 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 or 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 — A walled and roofed building, a manufactured home, or a gas or liquid storage tank that is principally above ground.

Substantial Damage — Damage of any origin sustained by a structure whereby the cost of restoring the structure to its condition before damage would equal or exceed 50 percent of the market value of the structure before the damage occurred.

Substantial Improvement — Any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or 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:

[1] Any project for improvement of a structure to correct existing violations of State or local health, sanitary or safety code specifications which have been identified by the local code enforcement officer and which are the minimum necessary to assure safe living conditions; or

[2] Any alteration of a "historic structure", provided that the alteration will not preclude the structure's continued designation as a "historic structure".

Variance — A grant of relief from the requirements of this ordinance that permits construction in a manner that would otherwise be prohibited by this ordinance.

Violation – The failure of a structure or other development to be fully compliant with this ordinance. A new or substantially improved structure or other development

SECTION 2. The Township Code of the Township of Berkeley is hereby amended and supplemented so as to amend Chapter 29, entitled "Flood Hazard Areas" so as to amend Section 29-3.2, entitled "Basis For Establishing the Areas of Special Flood Hazard", which shall now read as follows:

§29-3.2 Basis for Establishing the Areas of Special Flood Hazard.

The areas of special flood hazard for the Township of Berkeley Community No. 340369 are identified and defined on the following documents prepared by the Federal Emergency Management Agency:

- a) A scientific and engineering report "Flood Insurance Study, Ocean County, New Jersey (All Jurisdictions)" dated September 29, 2006.
- b) Flood Insurance Rate Map for Ocean County, New Jersey (All Jurisdictions) as shown on Index and panel(s) 0279, 0281, 0282, 0283, 0284, 0287, 0291, 0295, 0301, 0303, 0304, 0308, 0309, 0312, 0314, 0315, 0316, 0317, 0318, 0319, 0328, 0329, 0336, 0337, 0338, 0339, 0406, 0407, 0426, 0427, 0428, 0429, 0436, 0437, 0438, 0439; whose effective date is September 29, 2006.
- c) **Best Available Flood Hazard Data. These documents shall take precedence over effective panels and FIS in construction and development regulations only. Where the effective mapping or Base Flood Elevation conflict or overlap with the Best Available Flood Hazard Data, whichever imposes the more stringent requirement shall prevail.**

The above documents are hereby adopted and declared to be a part of this ordinance. The Flood Insurance Study, maps and advisory documents are on file at 627 Pinewald-Keswick Road, Bayville, New Jersey.

SECTION 3. The Township Code of the Township of Berkeley is hereby amended and supplemented so as to amend Chapter 29, entitled

"Flood Hazard Areas" so as to amend Section 29-5.2, entitled "Specific Standards", which shall now read as follows:

§29-5.2 Specific Standards

In all areas of special flood hazards where base flood elevation data have been provided as set forth in SECTION 29-3.2, BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD HAZARD or in SECTION 29-4.3-2, 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, elevated above the base flood elevation or best available flood hazard data whichever is the more restrictive standard in compliance with applicable construction codes plus one foot (1') of freeboard;**
2. **Require within any AO zone on the municipality's FIRM that all new construction and substantial improvement of any residential structure shall have the lowest floor, including basement, elevated 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) or at or above the base flood elevation or best available flood hazard data, whichever is more restrictive in compliance with applicable construction codes plus one foot (1') of freeboard. 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 have the lowest floor, including basement together with the attendant utilities and sanitary facilities:

Either:

- i. **Elevated to or above the base flood elevation or best available flood hazard data whichever is the more restrictive standard; and**
- ii. **Require within any AO zone on the municipality's DFIRM that all new construction and substantial improvement of any commercial, industrial or other nonresidential structure shall**

have the lowest floor, including basement, elevated 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) or at or above the best available flood hazard data whichever is more restrictive. And, require adequate drainage paths around structures on slopes to guide floodwaters around and away from proposed structures;

Or

- iii. Be floodproofed so that below the base flood level or best available flood hazard data (whichever is more restrictive) the structure is watertight with walls substantially impermeable to the passage of water;
- iv. Have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy; and
- v. 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 section 29-4.3-3 [2] [ii].

C. Manufactured Homes

- 1. Manufactured homes shall be anchored in accordance with 29-5.1-A(2).
- 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 top of the lowest floor is at or above the base flood elevation or best available flood hazard data whichever is more restrictive.

SECTION 4. The Township Code of the Township of Berkeley is hereby amended and supplemented so as to amend Chapter 29, entitled "Flood Hazard Areas" so as to amend Section 29-5.4, entitled "Coastal High Hazard Area", which shall now read as follows:

§29-5.4 Coastal High Hazard Area

Coastal high hazard areas (V or VE Zones) are located within the areas of special flood hazard established in SECTION 29-3.2. 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 subdivision.**

B. Construction Methods

[1] Elevation

All new construction and substantial improvements shall be elevated on piling or columns so that:

- (i) **The bottom of the lowest horizontal structural member of the lowest floor (excluding the piling or columns) is elevated to or above the base flood elevation (published FIS/FIRM), the best available flood hazard data elevation or as required by the Uniform Construction Code (N.J.A.C. 5:23), whichever is more restrictive; and,**
- (ii) 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 or in SECTION 29-5.4-2 [4].

[2] Structural Support

- (i) All new construction and substantial improvements shall be securely anchored on piling or columns.
- (ii) 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).
- (iii) 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 SECTION 29-5.4-2 [1] and 29-5.4-2 [2] (i) and (ii).

[4] Space Below the Lowest Floor

- (i) Any alteration, repair, reconstruction or improvement to a structure started after the enactment of this ordinance 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.
- (ii) 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 10 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.
 - (a) breakaway wall collapse shall result from a water load less than that which would occur during the base flood and,
 - (b) 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.
- (iii) 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.
- (iv) Prior to construction, plans for any breakaway wall must be submitted to the Construction Code Official or Building Sub-Code Official for approval.**

SECTION 5. All ordinances or parts of ordinances inconsistent herewith are hereby repealed.

SECTION 6. If any section, subsection, sentence, clause, phrase or portion of this ordinance is for any reason held to be invalid or unconstitutional by a court of competent jurisdiction, such portion shall be deemed a separate, distinct and independent provision, and such holding shall not affect the validity of the remaining portions hereof.

SECTION 7. This ordinance shall take effect after second reading and publication as required by law.

CARMEN F. AMATO, JR., Mayor

JAMES J. BYRNES, Council President
JUDITH NOONAN, Council Vice President

NOTICE

NOTICE IS HEREBY GIVEN that the foregoing ordinance was introduced and passed on first reading at a regular meeting of the Township Council of the Township of Berkeley, in the County of Ocean, State of New Jersey, held on July 8, 2013, and will be considered for second reading and final passage at the regular meeting of said Governing Body to be held on the 22nd day of July, 2013, at 7:00 p.m., or as soon thereafter as this matter can be reached, at the meeting room of the Municipal Building located at 627 Pinewald-Keswick Road, Bayville, New Jersey, at which time all persons interested shall be given an opportunity to be heard concerning this ordinance.

BEVERLY CARLE, RMC
Township Clerk, Township of Berkeley