

ORDINANCE NO: 2011-04

AN ORDINANCE OF RADNOR TOWNSHIP, DELAWARE COUNTY, PENNSYLVANIA, AMENDING CHAPTER 280, ZONING, OF THE CODE OF THE TOWNSHIP OF RADNOR, ARTICLES: I, GENERAL PROVISIONS; XVII, FC FLOOD PLAIN CONSERVATION DISTRICT; XX, GENERAL REGULATIONS; XXII, ADMINISTRATION, AND CHAPTER 175, GRADING, EXCAVATIONS AND FILLS, OF THE CODE OF THE TOWNSHIP OF RADNOR TO ALL COMPLY WITH THE NATIONAL FLOOD INSURANCE PROGRAM AND PA ACT 166.

WHEREAS, the National Flood Insurance Program and PA Act 166, 32 P.S. §679.101, require certain provisions to appear in the zoning code of a township; and

WHEREAS, Radnor has determined that certain amendments, recommended by the Federal Emergency Management Agency, are necessary to comply with the National Flood Insurance Program and PA Act 166.

NOW, THEREFORE, be it *ORDAINED* and *ENACTED* that the Board of Commissioners does hereby amend Chapter 280, Zoning, Articles: I, General Provisions; XVII, FC Flood Plain Conservation District; XX, General Regulations; XXII, Administration; and Chapter 175, Grading, Excavations and Fills, as follows:

Section 1. §280-4. Definitions and usage. is amended by adding the following definitions: BASEMENT, BUILDING PERMIT OFFICER, COMPLETELY DRY SPACE, DEVELOPMENT, ESSENTIALLY DRY SPACE, HISTORIC STRUCTURE, LOWEST FLOOR, MANUFACTURED HOME, MANUFACTURED HOME PARK, NEW CONSTRUCTION, RECREATIONAL VEHICLE, REGULATORY FLOOD ELEVATION, SANITARY LANDFILL, STRUCTURE, SUBSTANTIAL DAMAGE, SUBSTANTIAL IMPROVEMENT, ZONING PERMIT, and ZONING PERMIT OFFICER, by deleting MOBILE HOME, by replacing Federal Insurance Administration with Federal Emergency Management Agency, and by replacing Department of Environmental Resources with Department of Environmental Protection, to read as follows:

BASEMENT - means any area of the building having its floor below ground level on all sides.

BUILDING PERMIT OFFICER – See Enforcement Officer.

COMPLETELY DRY SPACE - a space which will remain totally dry during flooding; the structure is designed and constructed to prevent the passage of water and water vapor.

DEVELOPMENT - any man-made change to improved or unimproved real estate, including but not limited to the construction, reconstruction, renovation, repair, expansion, or alteration of buildings or other STRUCTURES; the placement of manufactured homes; streets, and other paving; utilities; filling, grading and excavation; mining; dredging; drilling operations; storage of equipment or materials; and the subdivision of land.

ENFORCEMENT OFFICER – The zoning permit officer, building permit officer, or other individual appointed by the municipality to enforce these Ordinances within the jurisdiction of the municipality.

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ESSENTIALLY DRY SPACE - a space which will remain dry during flooding, except for the passage of some water vapor or minor seepage; the structure is substantially impermeable to the passage of water.

FLOODPLAIN CONSERVATION DISTRICT - The low area adjoining and including any water- or drainage course or body of water subject to a one-hundred-year-recurrence-interval flood, as delineated by the Flood Insurance Study (FIS) dated November 18, 2009 and shown on the FEMA floodplain maps, or the most recent revision thereof for the Township of Radnor, Delaware County, Pennsylvania, as prepared by the United States Department of Housing and Urban Development, Federal Emergency Management Agency [Federal Insurance Administration]. In addition, "floodplain conservation district" shall be defined to include all areas, not shown on the map, which, by hydrological profile analysis, are calculated to be inundated during a one-hundred-year frequency flood.

HISTORIC STRUCTURE - any structure that is:

- (i) 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;
- (ii) 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;
- (iii) Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of Interior; or
- (iv) 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 fully enclosed area (including basement). An unfinished, flood resistant partially enclosed area, used solely for parking of vehicles, building access, and incidental storage, in an area other than a basement area is not considered the lowest floor of a building, provided that such space is not designed and built so that the structure is in violation of the applicable non-elevation design requirements of this ordinance.

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 includes park trailers, travel trailers, recreational and other similar vehicles which are placed on a site for more than 180 consecutive days.

MANUFACTURED HOME PARK - a parcel of land under single ownership, which has been planned and improved for the placement of two or more manufactured homes for non-transient use.

[MOBILE HOME – A one-family dwelling unit of vehicular, portable design, built on a chassis and designed to be moved from one site to another and to be used without a permanent foundation.]

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NEW CONSTRUCTION - structures for which the start of construction commenced on or after, 6/1/1977 and includes any subsequent improvements thereto.

RECREATIONAL VEHICLE - a vehicle which is (i) built on a single chassis; (ii) not more than 400 square feet, measured at the largest horizontal projections; (iii) designed to be self-propelled or permanently towable by a light-duty truck; (iv) not designed for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

REGULATORY FLOOD ELEVATION - The one hundred (100) year flood elevation plus a freeboard safety factor of one and one half (1 ½') feet.

SANITARY LANDFILL - solid waste disposal site where waste is spread in layers, compacted, and covered with soil or other cover materials each day to minimize pest, aesthetic, disease, air pollution, and water pollution problems.

STRUCTURE - anything constructed or erected on the ground or attached to the ground including, but not limited to buildings, sheds, manufactured homes, and other similar items. This term includes any man-made object having an ascertainable stationary location on or in land or water whether or not affixed to land.

SUBSTANTIAL DAMAGE - damage from any cause sustained by a structure whereby the cost of restoring the structure to its before-damaged condition would equal or exceed fifty (50) percent or more 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 fifty (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 (or "repetitive loss" when a repetitive loss provision is used) 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 official 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."

WETLANDS - Those areas that are inundated and saturated by surface or ground water at a frequency or duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions, including swamps, marshes, bogs and similar areas; or as further defined by the Pennsylvania Department of Environmental Protection [Department of Environmental Resources].
[Added 10-15-1991 by Ord. No. 91-40]

ZONING PERMIT - A document issued by a governing authority permitting land to be used for a specific purpose.

ZONING PERMIT OFFICER - See Enforcement Officer

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Article XVII
FC Floodplain Conservation District

§ 280-73 Application of regulations.

In the Floodplain Conservation District, the regulations contained in this article shall apply.

§ 280-74 Intent.

Pursuant to the powers and authority granted by the Pennsylvania Municipalities Planning Code, Act No. 247, effective January 1, 1969, and in the interest of the public health, safety and welfare, the regulations of the Floodplain Conservation District are intended to protect areas of the Township which are located in a floodplain subject to periodic flooding waters. In advancing this principal and the general purposes of this chapter and the Comprehensive Plan, the specific intent of this article is:

- A. To regulate or prevent the erection of buildings and other structures in areas unfit for development by reason of periodic flooding.
- B. To protect public health, by preventing pollution of surface and subsurface water supplies and providing surface area to absorb and retain runoff for maintenance of the subsurface water supply.
- C. To protect public safety, by preserving natural floodplains and valley flats which are subject to periodic flooding in order to:
 - (1) Prevent the increase in flood volume and rate of flow which results from covering the floodplains with impervious surfaces and from constricting natural drainage channels.
 - (2) Provide areas for the deposition of sediment.
- D. To prevent added downstream damage from increased flood volume and rate of flow and to permit uses of the floodplain compatible with the preservation of natural conditions and the maintenance of the stream flow throughout the year.
- E. To minimize the financial burden imposed on the community, governmental bodies and individuals by floods.

§280-75. Designation of district boundaries. is hereby amended by amending the map panels listed in subsection A and by replacing Federal Insurance Administrator with Federal Emergency Management Agency in subsection E, to read as follows:

- A. The Floodplain Conservation District, as defined in § 280-4B, shall be those areas of Radnor Township that are subject to the one-hundred-year flood, as identified on the Flood Insurance Study (FIS) dated November 18, 2009 and shown on the FEMA floodplain maps, or the most recent revision thereof as issued by the Federal Emergency Management Agency. In addition, Floodplain Conservation District shall be defined to include all areas, not shown on the map,

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which, by hydrological profile analysis, are calculated to be inundated during a one-hundred-year frequency flood.

[The Floodplain Conservation District, as defined in § 280-4B, shall be those areas of Radnor Township that are subject to the one-hundred-year flood, as identified on the Flood Insurance Study (FIS) and shown on Map Panels 0001-4, 0006-7, 0008-9 and 0013-14, effective September 30, 1993, as prepared by the Federal Emergency Management Agency (FEMA). In addition, "floodplain conservation district" shall be defined to include all areas, not shown on the map, which, by hydrological profile analysis, are calculated to be inundated during a one-hundred-year frequency flood. Such maps are hereby made a part of this chapter and shall be available to the public at the Township Municipal Building.]

The Floodplain Conservation District shall comprise three subdistricts, as follows:

- (1) FW (Floodway Area): the area identified as floodway in the AE Zone in the Flood Insurance Study prepared by FEMA. The term shall also include floodway areas which have been identified in other available studies or sources of information for those [floodplain] areas where no floodway has been identified in the Flood Insurance Study.
- (2) FF (Flood-Fringe Area): the remaining portions of the one-hundred-year floodplain in those areas identified as an AE Zone in the Flood Insurance Study, where a floodway has been delineated. The basis for the outermost boundary of this area shall be the one-hundred-year elevations as shown in the flood profiles contained in the Flood Insurance Study.
- (3) FA (General Floodplain Area): the areas identified as Zone A in the FIS for which no one-hundred-year-flood elevations have been provided. When available, information from other federal, state and other acceptable sources, including those areas shown as alluvial soils in the Chester and Delaware Counties Soil Survey, shall be used to determine the one-hundred-year elevation, as well as a floodway area, if possible. When no other information is available, the one-hundred-year elevation shall be determined by using a point on the boundary of the identified FIRM [floodplain area] which is nearest the construction site in question. In lieu of the above delineation method, the Township may require the applicant to determine the elevation with hydrologic and hydraulic engineering techniques. Hydrologic and hydraulic analyses shall be undertaken only by professional engineers or others of demonstrated qualifications approved by the Township who shall certify that the technical methods used correctly reflect currently accepted technical concepts. Studies, analyses and computations shall be submitted in sufficient detail to allow a thorough technical review by the Township.

Special requirements for FW and FA areas:

Within and FW (Floodway Area) or FA (General Floodplain Area), the following provisions apply:

1. Any new construction, development, use, activity, or encroachment that would cause any increase in flood heights shall be prohibited.
2. No new construction or development shall be allowed, unless a permit is obtained from the Department of Environmental Protection Regional Office.

- B. In the case of any dispute concerning the boundaries of a Floodplain Conservation District, an initial determination shall be made by the Township Engineer. Such determination shall be based upon the criteria established in this article. It shall be the responsibility of the applicant to supply all the necessary plans and maps in sufficient detail to allow the Township Engineer to make the determination.

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- C. Any party aggrieved by a decision of the Township Engineer as to the boundaries of the Floodplain Conservation District, as defined in Subsections A and B above, which may include the grounds that the data referred to therein is or has become incorrect because of changes due to natural or other causes or because of changes indicated by future hydrologic and hydraulic studies, may appeal to the Zoning Hearing Board. The Zoning Hearing Board, in making such determination, shall use criteria established in this article. The burden of proof in such an appeal shall be on the appellant.
- D. The Floodplain Conservation District shall be deemed an overlay of any zoning district now or hereafter applicable to any lot. Should the Floodplain Conservation District be declared inapplicable to any tract for any reason, the zoning applicable to such tract shall be deemed to be the district in which it is located without consideration of this article.
- E. The identified Floodplain Conservation District [floodplain area] may be revised or modified by the Board of Commissioners where studies or information provided by a qualified agency or person document the need for such revision. Prior to the change, however, approval must be obtained from the Federal Emergency Management Agency [Federal Insurance Administration].
- F. Any application submitted to the Township that would cause the elevation of the 100 year flood plain to change shall require the Township to notify the immediate neighbors within 500 feet of the property under review (upstream and downstream).

§ 280-76 Permitted uses. Within any designated Floodplain Conservation District [floodway area], no construction, development, use, activity or encroachment of any kind shall be allowed except where the effect of such proposed activity on flood heights is fully offset by accompanying stream improvements.

- A. Subject to such limitation, the following uses and no other are permitted in the Floodplain Conservation District, provided that the use is permitted by the applicable zoning of the property:
- (1) Customary agricultural operations, excluding structures.
 - (2) Pastures, grazing land, outdoor plant nursery and orchard, excluding structures.
 - (3) Wildlife sanctuary, woodland preserve and arboretum, excluding structures.
 - (4) Recreation use such as park, day camp, picnic grove, golf course, hunting, fishing and boating club, excluding structures.
- [(5) Sanitary sewers and sewage pumping stations, provided that the construction is floodproof.]
- (5) Water and Sanitary Sewer Facilities and Systems
- A. All new or replacement water and sanitary sewer facilities and systems shall be located, designed and constructed to minimize or eliminate flood damages and the infiltration of flood waters.
 - B. Sanitary sewer facilities and systems shall be designed to prevent the discharge of untreated sewage into flood waters.
 - C. No part of any on-site sewage system shall be located within any Floodplain Conservation District except in strict compliance with all State and local regulations

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for such systems. If any such system is permitted, it shall be located so as to avoid impairment to it, or contamination from it, during a flood.

[(6) Waterlines.]

(6) Other Utilities

All other utilities such as gas lines, electrical and telephone systems shall be located, elevated (where possible) and constructed to minimize the chance of impairment during a flood.

(7) Placement of Buildings and Structures

All buildings and structures shall be designed, located, and constructed so as to offer the minimum obstruction to the flow of water and shall be designed to have a minimum effect upon the flow and height of flood water.

(8) Anchoring

- A. All buildings and structures shall be firmly anchored in accordance with accepted engineering practices to prevent flotation, collapse, or lateral movement.
- B. All air ducts, large pipes, storage tanks, and other similar objects or components located below the Regulatory Flood Elevation shall be securely anchored or affixed to prevent flotation.
- C. The design and construction requirements of the UCC pertaining to this subsection as referred to in 34 PA Code (Chapters 401-405 as amended) and contained in the 2003 IBC (Secs. 1605.2.2, 1605.3.1.2, 1612.4 and Appendix G501.3), the IRC (Secs. R301.1 & R323.1.1) and ASCE 24-98 (Sec. 5.6) shall be utilized.

(9) Floors, Walls and Ceilings

- A. Wood flooring used at or below the Regulatory Flood Elevation shall be installed to accommodate a lateral expansion of the flooring, perpendicular to the flooring grain without causing structural damage to the building.
- B. Plywood used at or below the Regulatory Flood Elevation shall be of a "marine" or "water-resistant" variety.
- C. Walls and ceilings at or below the Regulatory Flood Elevation shall be designed and constructed of materials that are "water-resistant" and will withstand inundation.
- D. Windows, doors, and other components at or below the Regulatory Flood Elevation shall be made of metal or other "water-resistant" material.
- E. The provisions of the UCC pertaining to this subsection and referenced in the 34 PA Code (Chapters 401-405 as amended) and contained in the 2003 IBC (Secs. 801.1.3, 1403.2, 1403.4, 1403.6 and 1404.2), the 2003 IRC (Secs. R323.1.7 & R501.3) and ASCE 24-98 (Chapter 6).

(10) Paints and Adhesives

- A. Paints and other finishes used at or below the Regulatory Flood Elevation shall be of "marine" or "water-resistant" quality.
- B. Adhesives used at or below the Regulatory Flood Elevation shall be of a "marine" or "water-resistant" variety.
- C. All wooden components (doors, trim, cabinets, etc.) shall be finished with a "marine" or "water-resistant" paint or other finishing material.

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D. The standards and specifications contained in 34 PA Code (Chapters 401-405, as amended) the 2003 IBC (Secs. 801.1.3, 1403.7 and Appendix G) and the 2003 IRC (Secs. R323.1.7).

(11) Electrical Components

- A. Electrical distribution panels shall be at least three (3) feet above the one hundred (100) year flood elevation.
- B. Separate electrical circuits shall serve lower levels and shall be dropped from above.
- C. The provisions pertaining to the above provisions and referenced in the UCC and 34 PA Code (Chapters 401-405) as amended and contained in the 2003 IBC (Sec. 1612.4), the IRC (Sec. R323.1.5), the 2000 IFGC (Secs. R301.5 and R1601.3.8) and ASCE 24 (Chapter 8) shall be utilized.

(12) Equipment

- A. Water heaters, furnaces, air conditioning and ventilating units, and other electrical, mechanical or utility equipment or apparatus shall not be located below the Regulatory Flood Elevation.
- B. The provisions pertaining to the above provision and referenced in the UCC and 34 PA Code (Chapters 401-405), as amended and contained in the 2003 IBC (Sec. 1612.4), the 2003 IRC (Secs. R323.1.5) the 2000 IFGC (Secs. R301.5 and R1601.3.8) and ASCE 24 (Chapter 8) shall be utilized.

(13) [7] Boundary fences, subject to the approval of the Township Engineer.

(14) [8] Dams, culverts and bridges approved by the commonwealth.

(15) [9] Storm sewers, subject to the approval of the Township Engineer.

[B. Three-fourths of the required front, side or rear yards and required lot area for any district are permitted.]

C. Where parking lots and/or driveways are required by the regulations for the district applicable to the lot previously, parking lots and driveways shall be required.

Section 4. §280-77. Prohibited uses. is hereby amended adding replacing mobile home with manufactured home and adding subsection F, to read as follows:

Under no circumstances will the following activities and/or development be located, enlarged or expanded within the Floodplain Conservation District, since they present a special hazard to the health and safety of the public.

A. Hospitals (public or private).

B. Nursing homes (public or private).

C. Jails or prisons.

D. Individual manufactured homes [mobile homes], new manufactured home [mobile home] parks, manufactured home [mobile home] subdivisions and substantial improvements thereto, as well as individual manufactured homes [mobile homes].

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- E. The production, storage or maintenance of a supply of hazardous materials and substances as defined under the Pennsylvania Flood Plain Management Act (Act 166 of 1978), Section 207 (32 P.S. § 679.207).
- F. No expansion or enlargement of an existing structure shall be allowed within any Regulatory Flood Elevation area that would, together with all other existing and anticipated development, increase the one hundred (100) year flood elevation more than one (1) foot at any point.

Section 5. §280-78. Grading, filling and storage of materials. subsection B is hereby amended by replacing Department of Environmental Resources with Department of Environmental Protection and adding subsection C, Fill , to read as follows:

- A. A change in grade by either cut or fill, or a combination of both, may be permitted only upon the following conditions:
- (1) The effect is not to alter the cross-sectional area of the profile of the floodplain; and
 - (2) The effect is not to increase the elevation of the one-hundred-year-frequency flood.
- B. No storage of any material that may be hazardous to the health and welfare of the surrounding population or which is in violation of the Clean Streams Law or regulations of the Department of Environmental Protection [Department of Environmental Resources] shall be permitted within the Floodplain Conservation District as herein defined.
- C. Fill: If fill is used, it shall:
- (1) extend laterally at least fifteen (15) feet beyond the building line from all points, unless approved otherwise by the Township Engineer;
 - (2) consist of soil or small rock materials only - Sanitary Landfills shall not be permitted;
 - (3) be compacted to provide the necessary permeability and resistance to erosion, scouring, or settling;
 - (4) be no steeper than one (1) vertical to two (2) horizontal, feet unless substantiated data, justifying steeper slopes are submitted to, and approved by the Township Engineer; and, contained in the 2003 IBC (Sec. 1801.1 and 1803.4) shall be utilized.

§ 280-79 Municipal liability.

The grant of a zoning approval or approval of a subdivision plan in the Floodplain Conservation District shall not constitute a representation, guaranty or warranty of any kind by the Township or by an official or employee thereof of the practicability or safety of the proposed uses and shall create no liability upon the Township, its officials or employees; nor shall such grant or approval imply in any way a waiver of the requirements of this article or compliance with any federal or state law governing streams and other bodies of water.

§ 280-80 Conflicts with other regulations.

In the event of any conflict with other Township ordinances, rules, building codes or regulations, the provisions of this Floodplain Conservation District Article shall prevail.

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Section 6. §280-81. Review of applications for variance. is hereby amended adding text to subsection A, adding subsection C(1)(c), and replacing Federal Emergency Management Agency with Federal Insurance Administration in subsection E, to read as follows:

A. Standards and criteria. In any instance where the Zoning Hearing Board is required to consider a request for variance from the provisions of this article, the Board shall determine that the standards and criteria enumerated in § 280-145 of this chapter and Section 912 of the Pennsylvania Municipalities Planning Code are met before granting the request. A variance shall be required for any construction, development, use, or activity within any Regulatory Flood Elevation area that would, together with all other existing and anticipated development, increase the one hundred (100) year flood elevation more than one (1) foot at any point.

(1) In addition to the standards and criteria enumerated in said § 280-145 and Section 912, the Board shall meet the following standards:

(a) An affirmative decision shall not be issued by the Zoning Hearing Board within the designated floodway if any increase in the flood levels during the base flood discharge would result.

(b) Affirmative decisions shall only be issued by the Zoning Hearing Board upon:

[1] A showing of good and sufficient cause.

[2] A determination that failure to grant the appeal would result in exceptional hardship to the applicant.

[3] A determination that the granting of an appeal will not result in increased flood heights, additional threats to public safety and extraordinary public expense; create nuisances; cause fraud on or victimization of the public; or conflict with existing local laws or ordinances.

(c) Affirmative decisions shall be issued only upon determination that it is the minimum necessary, considering the flood hazard, to afford relief.

(2) The Board shall also consider the following factors:

(a) The proposed water supply and sanitation systems and the ability of these systems to avoid causing disease, contamination and unsanitary conditions.

(b) The relationship of the proposed use to the Comprehensive Plan and floodplain or stormwater management program for the area.

(c) The safety of access to the property in times of flood by ordinary and emergency vehicles.

(d) The expected heights, velocity, duration, rate of rise and sediment transport of the floodwaters expected at the site.

(e) Such other factors which are relevant to the purposes of this article, including compliance with any state and federal laws and regulations relating to Floodplain Conservation District [floodplain areas].

B. Procedure; streams and other bodies of water. Upon receiving an application for a variance, the Zoning Hearing Board shall, prior to hearing, require the applicant to furnish such of the following material as the Township Engineer shall deem necessary for a complete consideration of the matter by the Board:

(1) Plans, in triplicate, drawn to scale, showing the nature, location, dimensions and elevation of the lot and existing and proposed uses; photographs showing existing uses and vegetation; soil types; and other pertinent information.

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- (2) A series of cross sections at twenty-five-foot intervals along the lot shoreline, showing the stream channel or the lake or pond bottom and the elevation of adjoining land areas to be occupied by the proposed uses, and high-water information.
- (3) Profile showing the slope of the bottom of the channel, lake or pond.
- (4) Specifications for building materials and construction, flood proofing, filling, dredging, grading, storage, water supply and sanitary facilities.

C. Conditions.

- (1) Any structure permitted by variance shall include flood proofing measures according to the following criteria:

- (a) All structures shall be:

- [1] Firmly anchored in accordance with accepted engineering practices to prevent flotation, collapse or lateral movement.
- [2] Constructed so as to prevent the entrance of floodwaters into the water supply and waste treatment systems as well as other utility and facility systems. In addition, waste treatment systems shall be designed to minimize or eliminate discharges from the systems into the floodwaters.

- (b) All new construction shall have the lowest floor, including the basement, elevated to one foot above the one-hundred-year-flood elevation.

- (c) Space below the lowest floor.

Fully enclosed space below the lowest floor (including basement) is prohibited.

Partially enclosed space below the lowest floor (including basement) which will be used solely for the parking of a vehicle, building access, or incidental storage in an area other than a basement, shall be designed and constructed to allow for the automatic entry and exit of flood waters for the purpose of equalizing hydrostatic forces on exterior walls. The term "partially enclosed space" also includes crawl spaces.

Designs for meeting this requirement must either be certified by a registered professional engineer or architect, or meet or exceed the following minimum criteria:

- a. a minimum of two openings having a net total area of not less than one (1) square inch for every square foot of enclosed space.
- b. the bottom of all openings shall be no higher than one (1) foot above grade.
- c. openings may be equipped with screens, louvers, etc. or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.

~~(c)~~(d) All improvements to existing structures shall be constructed so that:

- [1] Improvements to residential structures shall be elevated to the greatest extent possible. Any portion of the structure not elevated to one foot above the one-

hundred-year-flood elevation shall meet the requirements of Subsection C(1)(c)[2] below.

- [2] Improvements to nonresidential structures shall be flood proofed according to the classification W1-W4 of the Flood proofing Regulations, United States Army Corps of Engineers, pamphlet EP 1165 2 314.

- (2) In addition, upon consideration of the purposes of this article, the Board may attach such conditions to the granting of a variance as it deems necessary to further the purposes of this article. Among such conditions, without limitation because of specific enumeration, may be included:
- (a) Modification of waste disposal and water supply facilities.
 - (b) Limitations on periods of use and operation.
 - (c) Imposition of operational controls, sureties and deed restrictions.
 - (d) Flood proofing measures such as the following, without limitation because of specific enumeration:
 - [1] Anchorage to resist flotation and lateral movement.
 - [2] Installation of watertight doors, bulkheads and shutters.
 - [3] Reinforcement of walls to resist water pressures.
 - [4] Use of paints, membranes or mortars to reduce seepage of water through walls.
 - [5] Addition of mass or weight to structures to resist flotation.
 - [6] Installation of pumps to lower water levels in structures.
 - [7] Pumping facilities for subsurface external foundation wall and basement floor pressures.
 - [8] Construction to resist rupture or collapse caused by water pressure or floating debris.
 - [9] Cutoff valves on sewer lines.

- D. The Zoning Hearing Board shall notify the applicant, in writing, that:
- (1) The issuance of a decision to allow construction of a structure below the base flood elevation will result in increased premium rates for flood insurance.
 - (2) Such construction below the base flood elevation increases risks to life and property. Such notification shall be maintained with a record of all decisions, as required in Subsection E of this section.
- E. The Zoning Hearing Board shall:
- (1) Maintain a record of all decisions, including justification for their issuance.
 - (2) Report such decisions issued in its annual report submitted to the Federal Emergency Management Agency [Federal Insurance Administration].

§ 280-82 Variance conditions.

In any case where the Zoning Hearing Board shall grant a variance to permit the erection of a structure in the floodplain or a variance to permit a change in nonconforming use of a structure already existing in the floodplain, the Board shall, for the protection of prospective purchasers and lessees, impose the following conditions:

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- A. Require the applicant to advise prospective purchasers and/or lessees that the lot is located either entirely or partially, as the case may be, in the floodplain.
- B. Require that, before settlement or change in use, as the case may be, the purchaser or lessee shall signify, in writing, that he has been advised that the premises lies partially or entirely in the floodplain, and a signed copy of such signification shall be delivered to the Township by the applicant.
- C. A deed restriction shall be created and placed on record to run as a covenant with the land, which restriction shall contain the following provision: "This lot is entirely (partially) within the floodplain as defined by Article XVII of Chapter 280, Zoning, of the Code of Radnor Township, Delaware County, Pennsylvania, as amended."

Section 7. §280-115. Conservation of Wetlands. subsections B, C, and D are hereby amended by replacing Department of Environmental Resources with Department of Environmental Protection, to read as follows:

- B. Should the Township Engineer dispute the delineation submitted by the applicant:

(1) The Township and the applicant may select a mutually acceptable, qualified professional to reexamine the site for boundary confirmation and readjustment. All costs for such work shall be borne by the applicant. The Township at no time shall be held accountable for any additional boundary modifications imposed by state or federal agencies. If either party is dissatisfied with the wetlands boundary as confirmed or adjusted through this procedure, it shall have the right to appeal those findings to the United States Army Corps of Engineers, the Pennsylvania Department of Environmental Protection [Department of Environmental Resources] or the United States Fish and Wildlife Service for final boundary determination.

(2) As an alternative to the procedure described in Subsection B(1) above, the applicant may appeal the Township Engineer's findings directly to the appropriate regulatory agency, including the Army Corps of Engineers, the Pennsylvania Department of Environmental Protection [Department of Environmental Resources] or the United States Fish and Wildlife Service for boundary confirmation.

- C. Should the Township conclude, on the basis of the criteria cited in Subsection A above, that wetlands exist on the site, contrary to the applicant's findings:

(1) The Township and the applicant may select a mutually acceptable, qualified professional to reexamine the site, using the criteria cited in Subsection A above, to determine if wetlands exist. All costs for such work shall be borne by the applicant. The Township shall at no time be held accountable for wetlands found to exist by state or federal agencies.

(2) As an alternative to the procedure described in Subsection C(1) above, the Township may, at its discretion, request that either the United States Army Corps of Engineers, the Pennsylvania Department of Environmental Protection [Department of Environmental Resources] or the United States Fish and Wildlife Service verify the existence of wetlands. In the event that such agency or agencies verify the existence of wetlands, the applicant will be required to perform a delineation in accordance with the requirements of Subsection A above

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and secure any required wetlands permits or waivers pursuant thereto in accordance with the requirements of Subsection D below.

- D. Unless it is clearly evident in the plans submitted by the applicant and/or through any field review by the Township Engineer that no disturbance to the designated wetlands is anticipated, the delineation performed shall be submitted to the appropriate regulatory agencies, including but not limited to the United States Army Corps of Engineers and the Pennsylvania Department of Environmental Protection [Department of Environmental Resources] for boundary confirmation and/or requisite wetlands permits or waivers pursuant thereto. All potential impacts on wetlands shall conform to applicable regulations, as amended.

Section 8. §280-107. Prohibited uses; performance standards. subsection C is hereby amended by replacing mobile homes with manufactured homes, to read as follows:

- C. Trailer camps and automobile graveyards shall not be permitted in any district, and no manufactured home [mobile home] may be used for living or housekeeping purposes within the Township. An unoccupied manufactured home [mobile home] shall not be parked on a lot unless such manufactured home [mobile home] is parked so as not to be visible from a street or other property line or is suitably screened.

Section 9. §280-112. Slope controls. subsections H and N are hereby amended by replacing Department of Environmental Resources with Department of Environmental Protection, to read as follows:

- H. All applications for building permits for structures located, in whole or in part, on tracts with areas containing steep slopes shall submit, along with the application, a site plan. Such application shall also include a stormwater runoff plan and a copy of the erosion and sedimentation control plan as required by the Pennsylvania Department of Environmental Protection (DEP) [Department of Environmental Resources (DER)].
- N. The Zoning Hearing Board may authorize, as a special exception, the following uses upon submission of an erosion and sedimentation plan:
- (1) Sealed public water supply wells, with the approval of the Township Engineer and the Pennsylvania Department of Environmental Protection (DEP) [Department of Environmental Resources (DER)].
 - (2) Sanitary and storm sewers, with the approval of the Township Engineer and the Pennsylvania Department of Environmental Protection (DEP) [Department of Environmental Resources (DER)].
 - (3) Underground utility disposal systems, when constructed in compliance with the Act 208 amendments to Act 537, the Pennsylvania Sewage Facilities Act.

Section 10. §280-131. Permits. is amended by adding subsection D, to read as follows:

- D. Prior to the issuance of any zoning permit,
(a) the Building Permit Officer shall review the application for the permit to determine if all other necessary government permits required by State and Federal laws have been

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obtained, such as those required by the Pennsylvania Sewage Facilities Act (Act 1966-537, as amended); the Pennsylvania Dam Safety and Encroachments Act (Act 1978-325, as amended); the Pennsylvania Clean Streams Act (Act 1937-394, as amended); and the U.S. Clean Water Act, Section 404, 33, U.S.C. 1344. No permit shall be issued until this determination has been made.

- (b) No encroachment, alteration, or improvement of any kind shall be made to any watercourse until all adjacent municipalities which may be affected by such action have been notified by the Township and until all required permits or approvals have been first obtained from the Department of Environmental Protection Regional Office.
- (c) In addition, the Federal Emergency Management Agency and Pennsylvania Department of Community and Economic Development, shall be notified by the Township prior to any alteration or relocation of any watercourse.

Section 11. §175-6. Permit Application. is hereby amended by adding subsections A(2)(a)[6], [7], and [8], to read as follows:

[6] The location of all existing and proposed buildings, structures, and other improvements, including the location of any existing or proposed subdivision and land development;

[7] The proposed lowest floor elevation of any proposed building based upon North American Vertical Datum of 1988;

[8] The elevation of the one hundred (100) year flood;

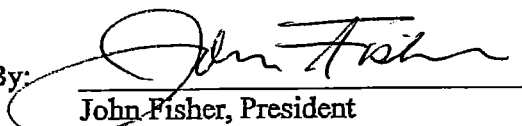
Section 12. Repealer. All ordinances or parts of ordinances which are inconsistent herewith are hereby repealed.

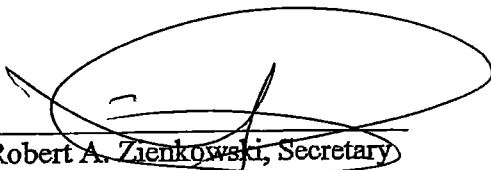
Section 13. Severability. If any sentence, clause, section or part of this Ordinance is for any reason found to be unconstitutional, illegal, or invalid, such unconstitutionality, illegality, or invalidity shall not affect or impair any of the remaining provisions, sentences, clauses, sections, or parts of this Ordinance. It is hereby declared as the intent of the Board of Commissioner of Radnor Township, that this Ordinance would have been adopted had such unconstitutional, illegal, or invalid sentence, clause, section, or part thereof not been included therein.

Section 14. Effective Date. This Ordinance shall become effective in accordance with the Home Rule Charter of Radnor Township.

ENACTED AND ORDAINED this 14th day of March, A.D., 2011.

RADNOR TOWNSHIP

By: 
John Fisher, President

ATTEST: 
Robert A. Zienkowski, Secretary

1/14/11

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