

**LOWER PROVIDENCE TOWNSHIP
Montgomery County, Pennsylvania**

**ORDINANCE #634
(Duly Adopted February 18, 2016)**

AN ORDINANCE OF LOWER PROVIDENCE TOWNSHIP, MONTGOMERY COUNTY, PENNSYLVANIA, ENACTING A NEW CHAPTER 86 TO THE LOWER PROVIDENCE TOWNSHIP CODIFIED ORDINANCES ENTITLED FLOODPLAIN ORDINANCE FOR THE PURPOSE OF COMPLYING WITH THE REQUIREMENTS OF THE NATIONAL FLOOD INSURANCE PROGRAM AND THE PENNSYLVANIA FLOOD PLAIN MANAGEMENT ACT (ACT 166 OF 1978); REQUIRING ALL PERSONS, PARTNERSHIPS, BUSINESSES, AND CORPORATIONS TO OBTAIN A PERMIT FOR ANY CONSTRUCTION OR DEVELOPMENT; PROVIDING FOR THE ISSUANCE OF SUCH PERMITS; SETTING FORTH CERTAIN MINIMUM REQUIREMENTS FOR NEW CONSTRUCTION AND DEVELOPMENT WITHIN AREAS OF THE TOWNSHIP WHICH ARE SUBJECT TO FLOODING; AND ESTABLISHING PENALTIES FOR ANY PERSONS WHO FAIL, OR REFUSE TO COMPLY WITH, THE REQUIREMENTS OR PROVISIONS OF THIS CHAPTER.

WHEREAS, the Legislature of the Commonwealth of Pennsylvania has, by the passage of the Pennsylvania Flood Plain Management Act (Act 166 of 1978), delegated the responsibility to local governmental units to adopt floodplain management regulations to promote public health, safety, and the general welfare of its citizenry; and

WHEREAS, the Board of Supervisors wishes to enact floodplain conservation and damage prevention regulations in compliance with the requirements of the National Flood Insurance Program and the Pennsylvania Flood Plain Management Act for the purpose of properly managing construction and development within areas of Lower Providence Township which are subject to flooding and for the purpose of protecting the public health, safety, and welfare of the residents of Lower Providence Township and all the people of the Commonwealth, their resources and the environment.

NOW THEREFORE, the Board of Supervisors of the Township of Lower Providence does hereby enact and ordain as follows:

ARTICLE I FLOODPLAIN ORDINANCE

A new Chapter 86, entitled "Floodplain Conservation and Damage Prevention" is hereby added to the Code of the Township of Lower Providence that shall read as follows:

CHAPTER 86
FLOODPLAIN CONSERVATION AND DAMAGE PREVENTION
PART 1
GENERAL PROVISIONS

§86-100. Intent.

The intent of this Chapter is to:

- A. Protect areas of the floodplain necessary to contain floodwaters.
- B. To permit only those uses in the floodplain that are compatible with preserving natural conditions and stream flow.
- C. Promote the general health, welfare, and safety of the community by preventing development in areas prone to flooding.
- D. Encourage the utilization of appropriate construction practices in order to prevent or minimize flood damage in the future.
- E. Minimize danger to public health by protecting water supply and natural drainage.
- F. Reduce financial burdens imposed on the community, its governmental units, and its residents, by preventing excessive development in areas subject to flooding.
- G. Comply with federal and state floodplain management requirements.

§86-101 Applicability.

- A. Floodplain Conservation District Defined. The Floodplain Conservation District ("FCD") is defined and established as the district applicable to those areas of Lower Providence Township subject to inundation by the waters of an one hundred (100) year flood as delineated on the FIRM for Lower Providence Township, Montgomery County, Pennsylvania, as issued by FEMA, dated March 2, 2016 or the most recent revision thereof. Said floodplain areas shall consist of the following specific areas:
 - (1) Zone AE;
 - (2) Zone A;
 - (3) Alluvial Soils in accordance with the following; and

- (a) Alluvial soils are those soils delineated as such by the USDA-NRCS Web-Based Soil Survey (available online at <http://websoilsurvey.nrcs.usda.gov/>), including, but not limited to, the following soils:
 - [1] Bowmansville-Knauers silt loams (Bo);
 - [2] Croton silt loam, occasionally ponded, 0 to 3 percent slopes (CrA)
 - [6] Rowland silt loam, 0 to 3 percent slopes (RwA); and
 - [8] Urban Land Occasionally Flooded (UIA).
 - (b) At its discretion, the Board of Supervisors may recognize a soils analysis prepared by a licensed soil scientist for specific alluvial soils delineation for an individual site and may allow this study to supersede the delineation shown for that site on the USDA-NRCS website.
- (4) Community Identified Flood Hazard Areas in accordance with Part 3 of this Chapter relating to *Community Identified Flood Hazard Areas Zone*.
- B. In lieu of the above, the Township may require the applicant to determine if the FCD covers the site with hydrologic and hydraulic analyses in accordance with the subsection below relating to *Hydrologic and Hydraulic Analyses* and this Chapter.
- C. The FCD shall be delineated according to FEMA's FIRMs which are hereby made a part of this Chapter, and along with any additional areas based on soils as described above in this Section. The FIRMs are available for inspection of any interested party during office hours at the Township's offices.
- D. The FCD shall be deemed an overlay on any zoning district set forth in Chapter 143 of the Code of the Township of Lower Providence. Additionally, the FCD shall be known as and may be cited as the "Floodplain Conservation District" or "FC" in Chapter 143.
- E. It shall be unlawful for any person, partnership, business or corporation to undertake, or cause to be undertaken, any construction or development anywhere within the FCD unless a floodplain permit has been obtained from the Floodplain Administrator. A floodplain permit shall not be required, however, for minor repairs to existing buildings or structures.
- F. Hydrologic and Hydraulic Analyses. When required, hydrologic and hydraulic analyses shall be undertaken only by a Pennsylvania licensed professional engineer or other professional of demonstrated and applicable qualifications, who shall certify that the technical methods used correctly reflect currently accepted technical concepts. Studies, analyses, computations, etc., shall be submitted in sufficient detail to allow a thorough technical review by the Township and PA DCED as applicable.

- G. Unless specified elsewhere in this Chapter, references to the FIRMs shall include FIRMs dated March 2, 2016 and issued by the FEMA, or the most recent revision thereof, including all digital data developed as part of the FIS.

§86-102. Abrogation and Greater Restrictions.

This Chapter 86 supersedes any other conflicting provisions which may be in effect in the FCD. However, any other chapter, code, or ordinance provisions shall remain in full force and effect to the extent that those provisions are more restrictive. If there is any conflict between any of the provisions of this Chapter, the more restrictive shall apply.

§86-103. Warning and Disclaimer of Liability.

- A. The degree of flood protection sought by the provisions of this Chapter is considered reasonable for regulatory purposes and is based on acceptable engineering methods of study. Larger floods may occur or flood heights may be increased by man-made or natural causes, such as ice jams and bridge openings restricted by debris. This Chapter does not imply that areas outside the FCD or that land uses permitted within such areas will be free from flooding or flood damages.
- B. This Chapter shall not create liability on the part of the Township or any officer or employee thereof for any flood damages that result from reliance on this Chapter or any administrative decision lawfully made thereunder.

PART 2

TERMS AND DEFINITIONS

§86-200. General Interpretations.

- A. Unless specifically defined below, terms and phrases used in this Chapter shall be interpreted so as to give this Chapter its most reasonable application.
- B. Rules of Interpretations. In this Chapter, the following rules of interpretation shall be used:
- (1) Terms used in the present tense shall include the future tense.
 - (2) Terms used in the singular include the plural and vice versa.

- (3) The terms “should” and “may” are permissive; the terms “must”, “shall” and “will” are mandatory.
- (4) The masculine gender includes the feminine and neuter. The feminine gender includes the neuter and masculine. The neuter gender includes both feminine and masculine.
- (5) The terms “building” or “structure” shall be construed as if followed by the phrase “or part thereof” or “portion thereof.”

§86-201. Specific Terms and Definitions.

For the purposes of this Chapter, the following terms shall have the following meanings:

ACCESSORY USE OR STRUCTURE: A use or structure on the same lot with, and of a nature customarily incidental and subordinate to, the principal use or structure.

BASE FLOOD: A flood which has a one (1) percent chance of being equaled or exceeded in any given year (also called the “one hundred [100] year flood”).

BASE FLOOD ELEVATION: The elevation shown on the FIRMs for Zone AE that indicates the water surface elevation resulting from a flood that has a one (1) percent or greater chance of being equaled or exceeded in any given year. The BFE is also shown on the FIS profile, and can be determined for Zone A floodplains.

BASEMENT: Any area of the building having its floor below ground level on all sides.

BUILDING: A combination of materials used to form a permanent structure having walls and a roof. Included shall be all manufactured homes and trailers to be used for human habitation.

DEVELOPMENT: Any man-made change to improved or unimproved real estate, including but not limited to:

- (1) Subdivision of land;
- (2) Construction, reconstruction, renovation, repair, expansion, or alteration of buildings or other structures;
- (3) The placement of manufactured homes;
- (4) Streets and other paving;
- (5) Utilities;
- (6) Fill;

- (7) Grading and excavation;
- (8) Mining;
- (9) Dredging;
- (10) Drilling operations; or
- (11) Storage of equipment or materials.

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.

EXISTING STRUCTURE/EXISTING CONSTRUCTION: A structure for which the start of construction commenced before the latest effective date of the FIRMs for the Township of Lower Providence.

EXPANSION TO AN EXISTING MANUFACTURED HOME PARK OR SUBDIVISION: The preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads).

FLOOD: A temporary inundation of normally dry land areas.

FLOOD INSURANCE RATE MAP: The official map on which FEMA or FIA has delineated both the areas of special flood hazards and the risk premium zones applicable to the community.

FLOOD INSURANCE STUDY: The official report provided by the FIA that includes flood profiles, the FIRMs, the Flood Boundary and Floodway Map, and the water surface elevation of the base flood.

FLOODPLAIN or FLOODPLAIN AREA: A relatively flat or low land area which is subject to partial or complete inundation from an adjoining or nearby stream, river, or watercourse; and/or any area subject to the unusual and rapid accumulation of surface waters from any source.

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.

FLOODWAY FRINGE: That part of the floodplain adjacent to and extending from the floodway and subject to inundation by the one hundred (100)-year flood.

FREEBOARD: A factor of safety usually expressed in feet above a flood level for purposes of floodplain management.

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:

- (1) Listed individually in the National Register of Historic Places (a listing maintained by the US DOI) or preliminarily determined by the PHMC as meeting the criteria for individual listing on the National Register;
- (2) Certified or preliminarily determined by the PHMC as contributing to the historical significance of a National Register historic district or a district preliminarily determined by the PHMC to be eligible to qualify for listing in the National Register, or;
- (3) Designated as historic by a municipal ordinance:
 - (a) Identified individually or as part of a local historic district by a zoning ordinance under the authority of the MPC; or
 - (b) Located in a local historic district that has been certified by the PHMC as meeting the requirements of the Pennsylvania Historic District Act (Act 167 of 1961).

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 Chapter.

MANUFACTURED HOME: 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 includes park trailers, travel trailers, recreational and other similar vehicles which are placed on a site for more than one hundred eighty (180) consecutive days.

MANUFACTURED HOME PARK OR SUBDIVISION: A parcel (or contiguous parcels) of land divided into two (2) or more manufactured home lots for rent or sale.

MINOR REPAIR: The replacement of existing work with equivalent materials for the purpose of its routine maintenance and upkeep, but not including the:

- (1) Cutting away of any wall or partition;

- (2) Removal or cutting of any structural beam or bearing support;
- (3) Removal or change of any required means of egress;
- (4) Rearrangement of parts of a structure affecting the exit way requirements; nor
- (5) Addition to, alteration of, replacement or relocation of any standpipe, water supply, sewer, drainage, drain leader, gas, oil, waste, vent, or similar piping, electric wiring or mechanical or other work affecting public health or general safety.

NEW CONSTRUCTION: Structures for which the start of construction commenced on or after March 2 2016, the effective start date of this floodplain management ordinance and includes any subsequent improvements to such structures. Any construction started after July 2, 1979 and before March 2, 2016, the effective start date of this floodplain management ordinance is subject to the ordinance in effect at the time the permit was issued, provided the start of construction was within one hundred eighty (180) days of permit issuance.

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 March 2, 2016, the effective date of these floodplain management ordinance regulations adopted by the Township of Lower Providence.

ONE HUNDRED (100) YEAR FLOOD: The flood having a one (1) percent chance of being equaled or exceeded in any given year. Also referred to as the “One (1) percent frequency flood,” or the “Base Flood,” as defined by FEMA in the FIS for Lower Providence Township.

PERSON: An individual, partnership, public or private association or corporation, firm, trust, estate, municipality, governmental unit, public utility, or any other legal entity whatsoever, which is recognized by law as the subject of rights and duties.

POST-FIRM STRUCTURE: A structure for which construction or substantial improvement occurred on or after December 31, 1974 or the date of Lower Providence Township’s initial FIRM date (July 2, 1979), whichever is later, and, as such, would be required to be compliant with the regulations of the NFIP.

PRE-FIRM STRUCTURE: A structure for which construction or substantial improvement occurred before December 31, 1974 or the date of Lower Providence Township’s initial FIRM date (July 2, 1979), whichever is later, and, as such, would not be required to be compliant with the regulations of the NFIP.

RECREATIONAL VEHICLE: A vehicle which is:

- (1) Built on a single chassis;

- (2) Not more than four (400) square feet, measured at the largest horizontal projections;
- (3) Designed to be self-propelled or permanently towable by a light-duty truck; and
- (4) Not designed for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel, or seasonal use.

REGULATORY FLOOD ELEVATION: The regulatory flood elevation is the elevation to which development is regulated for purposes of elevation and/or dry floodproofing. It is equal to the BFE plus a freeboard of one and one-half (1½) feet.

REPETITIVE LOSS: Flood related damages sustained by a structure on two (2) separate occasions during a ten (10) year period for which the cost of repairs at the time of each such flood event, on average, equals or exceeds twenty-five (25) percent of the market value of the structure before the damages occurred.

SITE: A land area having metes and bounds description and distinguished by the fact that development of the area is existing or intended to exist, and the land development of the area is existing or intended to exist, and the land development has or shall be undertaken comprehensively as a whole. A site contains one or more buildings and/or building lots, a circulation system, and supporting facilities.

SPECIAL PERMIT: A special approval which is required for hospitals, nursing homes, jails, new manufactured home parks and subdivisions, and substantial improvements to such existing parks, when such development is located in all or a designated portion of a floodplain.

SPECIAL FLOOD HAZARD AREA: An area in the floodplain subject to a one (1) percent or greater chance of flooding in any given year. It is shown on the FIRMs as Zone A or Zone AE.

SPECIAL FLOODPLAIN AREA: The areas identified as Zone AE in the FIS, where one hundred (100) year flood elevations have been provided.

START OF CONSTRUCTION: Includes substantial improvement and other proposed new development and means the date the floodplain permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, placement, or other improvement was within one hundred eighty (180) days from the date of the permit and shall be completed within twelve (12) months after the date of issuance of the permit unless a time extension is granted, in writing, by the Floodplain Administrator. The actual start means either the first (1st) placement of permanent construction of a structure on a site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does not include land preparation, such as clearing, grading, and filling; nor does it include the installation of streets and/or walkways; nor does it include excavation for a basement, footings, piers, or foundations or the 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 principal structure. For a substantial improvement, the actual start of construction means the first (1st) 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, including a gas or liquid storage tank that is principally above ground, as well as a manufactured home.

SUBDIVISION: The division or re-division of a lot, tract, or parcel of land by any means into two (2) or more lots, tracts, parcels or other divisions of land including changes in existing lot lines for the purpose, whether immediate or future, of lease, partition by the court for distribution to heirs, or devisees, transfer of ownership or building or lot development; provided, however, that the subdivision by lease of land for agricultural purposes into parcels of more than ten (10) acres, not involving any new street or easement of access or any residential dwelling, shall be exempted.

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 exceeds 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 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. Standards for alteration of historic structures are set forth in Part 4 of this Chapter relating to *Historic Structures in Improvements to Existing Structures in the FCD*.

TOWNSHIP BOARD OF SUPERVISORS: The Board of Supervisors of the Township of Lower Providence.

TOWNSHIP ENGINEER: A qualified, professional engineer licensed and registered to practice in the Commonwealth of Pennsylvania, designated by the LPT BOS to furnish professional and technical assistance for the administration of this Chapter.

TOWNSHIP OF LOWER PROVIDENCE: The body corporate of Lower Providence Township, Montgomery County, PA, may also be referenced as “the Township”.

TOWNSHIP PLANNING COMMISSION: The Planning Commission of the Township of Lower Providence.

TOWNSHIP SOLICITOR: The attorney licensed to practice in the Commonwealth of Pennsylvania, designated by the LPT BOS to furnish professional and legal assistance for the administration of this Chapter.

TOWNSHIP ZONING HEARING BOARD: The Zoning Hearing Board of the Township of Lower Providence.

TOWNSHIP ZONING OFFICER: The duly constituted municipal official designated by the LPT BOS to administer and enforce the Township Zoning Ordinance (Chapter 143) in accordance with its literal terms.

UNIFORM CONSTRUCTION CODE: The statewide building code adopted by the Pennsylvania General Assembly in 1999 applicable to new construction in all municipalities whether administered by the Township of Lower Providence, a third (3rd) party, or the Department of Labor and Industry. Applicable to residential and commercial buildings, the Code adopted the IRC and the IBC, by reference, as the construction standard applicable to state floodplain construction. For coordination purposes, references to the above are made specifically to various sections of the IRC and the IBC.

VIOLATION: The failure of a structure or other development to be fully compliant with the community's floodplain management regulations. A structure or other development without the elevation certificate, other certifications, or other evidence of compliance required in 44 CFR § 60.3(b)(5), (c) (4), (c)(10), (d)(3), (e)(2), (e)(4), or (e)(5) is presumed to be in violation until such time as that documentation is provided.

WATERCOURSE: Any natural or artificial swale, stream, channel, drain or culvert in which waters flow continuously or intermittently.

§86-202. Abbreviations.

For the purposes of this Chapter, the abbreviations shall include the following:

ASCE: The American Society of Civil Engineers, or any successor organization.

BFE: See "Base Flood Elevation".

CLOMR: Conditional letter of map revision.

FCD: Floodplain Conservation District.

FEMA: The Federal Emergency Management Agency, or any successor agency.

FIA: The Federal Insurance Administration, or any successor agency.

FIRM: See "Flood Insurance Rate Map".

FIS: See "Flood Insurance Study".

IBC: The most recent version of the International Building Code as referenced in the PA UCC as adopted pursuant to Chapter 67 of the Code of the Township of Lower Providence relating to Building Construction.

IRC: The most recent version of the International Residential Code as referenced in the PA UCC as adopted pursuant to Chapter 67 of the Code of the Township of Lower Providence relating to Building Construction.

LPT BOS: See “Township Board of Supervisors”.

LPT PC: See “Township Planning Commission”.

LPT ZHB: See “Township Zoning Hearing Board”.

LOMR: Letter of map revision.

MCCD: The Montgomery County Conservation District, or any successor agency.

MCPC: The Montgomery County Planning Commission, or any successor agency.

MPC: The most recent version of the Pennsylvania Municipalities Planning Code Act of 1968, P.L. 805, No. 247 as reenacted and amended.

NAVD: North American Vertical Datum.

NFIP: The National Flood Insurance Program, or any successor program.

PA DCED: The Pennsylvania Department of Community and Economic Development, or any successor agency.

PA DEP: The Pennsylvania Department of Environmental Protection, or any successor agency.

PA UCC: See “Uniform Construction Code”.

PHMC: The Pennsylvania Historical and Museum Commission, or any successor agency.

RFE: See “Regulatory Flood Elevation”.

SFHA: See “Special Flood Hazard Area”.

US ACE: The United States Army Corps of Engineers, or any successor agency.

US DA-NRCS: The United States Department of Agriculture-Natural Resources Conservation Service, or any successor agency.

US DOI: The United States Department of the Interior, or any successor agency.

US HUD: The United States Department of Housing and Urban Development, or any successor agency.

PART 3

IDENTIFICATION OF FLOODPLAIN AREAS

§86-300. Identification.

A. The FCD shall be any:

- (1) Areas of Lower Providence Township classified as SFHAs in the Initial Montgomery County-wide FIS and the accompanying FIRMs dated and issued by the FEMA on March 2, 2016, or the most recent revision thereof, including all digital data developed as part of the FIS.
- (2) Areas with alluvial soils as set forth in Part 1 of this Chapter; and
- (3) Community Identified Flood Hazard Areas in accordance with Part 3 of this Chapter relating to *Community Identified Flood Hazard Areas Zone*.

B. The above referenced FIS and FIRMs, and any subsequent revisions and amendments are hereby adopted by the Township of Lower Providence and declared to be a part of this Chapter.

§86-301. Description and Special Requirements of the FCD.

The FCD shall consist of the following specific zones:

- A. Floodway Zone. The Floodway Zone shall be those areas identified as “floodway” on the FIRMs, as well as, those areas which have been identified as floodways in other available studies or sources of information for those special floodplain areas where no floodway has been identified in the FIS. The floodway represents the channel of a watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation by more than one (1) foot at any point.
- (1) Within any floodway, no encroachments, including fill, new construction, substantial improvements, or other development shall be permitted unless it has been demonstrated through hydrologic and hydraulic analyses in accordance with Part 1 of this Chapter relating to *Hydrologic and Hydraulic Analyses*, that the

proposed encroachment would not result in any increase in flood levels within the Township during the occurrence of the base flood discharge.

- (2) No new construction or development shall be allowed, unless a permit is obtained from the PA DEP Regional Office.
- B. Zone AE. Zone AE shall be those areas identified as “Zone AE” on the FIRMs included in the FIS prepared by FEMA and for which BFEs have been provided in the FIS. No floodplain permit shall be granted for any construction, development, use, or activity within any Zone AE unless it is demonstrated that the cumulative effect of the proposed development would not, together with all other existing and anticipated development, increase the BFE more than one (1) foot at any point.
- C. Community Identified Flood Hazard Areas Zone. Community Identified Flood Hazard Areas shall be those areas where the Township has identified local flood hazard or ponding areas, as delineated and adopted on a “Local Flood Hazard Map” using best available topographic data and locally derived information such as flood of record, historic high water marks, soils, or approximate study methodologies.
- D. Zone A. Zone A shall be the areas identified as “Zone A” on the FIRMs included in the FIS prepared by FEMA and for which no one (1) percent annual chance flood elevations have been provided. For these areas, elevation and floodway information from other federal, state, or other acceptable source shall be used when available. Where other acceptable information is not available, the elevation shall be determined by using the elevation of a point on the boundary of the FCD which is nearest the construction site. In lieu of the above, the Township may require the applicant to determine the elevation with hydrologic and hydraulic analyses in accordance with Part 1 of this Chapter relating to *Hydrologic and Hydraulic Analyses*. No floodplain permit shall be granted for any construction, development, use, or activity within any Zone A unless it is demonstrated that the cumulative effect of the proposed development would not, together with all other existing and anticipated development, increase the BFE more than one (1) foot at any point.

§86-302. Changes in Identification of Area.

The FCD may be revised or modified by the LPT BOS where studies or information provided by a qualified agency or person documents the need for such revision. However, prior to any such change, approval must be obtained from FEMA. Additionally, as soon as practicable, but not later than six (6) months after the date such information becomes available, the Township shall notify FEMA of the changes by submitting technical or scientific data.

§86-303. Boundary Disputes.

Should a dispute concerning any identified floodplain boundary arise, an initial determination shall be made by the Township Engineer. Any party aggrieved by this decision or determination may appeal to the LPT BOS. The burden of proof shall be on the appellant.

§86-304. Corporate Boundary Changes.

Prior to development occurring in areas where annexation or other corporate boundary changes are proposed or have occurred, the Township shall review flood hazard data affecting the lands subject to boundary changes. The Township shall adopt and enforce floodplain regulations in areas subject to annexation or corporate boundary changes which meet or exceed those in 44 CFR 60.3.

PART 4

USES PERMITTED IN THE FCD

§86-400. Uses Permitted by Right.

The following uses are permitted by right in the FCD in compliance with the requirements of this Chapter:

- A. Any required yard setback. There is however a requirement that all buildings be set back a minimum of ten (10) feet from the limit of the FCD.
- B. Open space uses that are primarily passive in character shall be permitted to extend into the floodplain including:
 - (1) Wildlife sanctuaries, nature preserves, forest preserves, fishing areas, passive areas of public and private parklands, and reforestation; and
 - (2) Streambank stabilization.
- C. Forestry operations approved by the MCCD.
- D. Floodplain Crossings. The following floodplain crossings are permitted:
 - (1) Agricultural crossings by farm vehicles and livestock; and
 - (2) Driveways, roadways, recreational trails, and railroads provided that the applicant can show no impacts on flood heights. The cross section of any watercourse shall not be altered to the extent that there will be any expansion of the floodplain area onto any adjacent lands, including public rights-of-way, without the grant of

easement from the adjoining owner. These crossings must demonstrate safe passage of the public. The Township shall consider the quality of any available or proposed emergency access route when deliberating on the requirements of safe passage.

- (3) Public sewer and/or water lines, public utility transmission lines, and other similar utilities provided that the applicant can show no impacts on flood heights. The cross section of any watercourse shall not be altered to the extent that there will be any expansion of the floodplain area onto any adjacent lands, including public rights-of-way, without the grant of easement from the adjoining owner.

- E. Agricultural uses conducted in compliance with methods prescribed in the most recent version of PA DEP's Erosion and Sediment Pollution Control Manual or riparian corridor or watercourse conservation standards or similar regulations adopted by the Township.

§86-401. Uses Prohibited in the FCD.

The following uses are prohibited in the FCD:

- A. No new construction, alteration, or improvement of buildings and any other type of permanent structure, including fences shall be permitted in the floodway.
- B. Placement of fill within any designated floodway.
- C. Encroachment into any watercourse, except that permitted as set forth in this Part relating to *Floodplain Crossings*.
- D. Clearing of any existing vegetation, except where such clearing is necessary to prepare land for a use permitted as set forth in this Part relating to *Uses Permitted by Right* or *Uses Permitted by Conditional Use*, and where the effects of these actions are mitigated by reestablishment of vegetation.
- E. Use of fertilizers, pesticides, herbicides, and/or other chemicals by non-agricultural uses.
- F. Roads or driveways within Zone AE or Zone A, except where permitted as corridor crossings set forth in this Part relating to *Floodplain Crossings*.
- G. Motor or wheeled vehicle traffic in any area not designed to accommodate adequately the type and volume.
- H. Subsurface sewage disposal areas.
- I. Sod farming.

§86-402. Uses Permitted by Conditional Use in the FCD.

- A. The following uses are permitted by conditional use in the alluvial soils portion of the FCD that are not located within Zone AE or Zone A. The establishment of these uses shall be in compliance with the applicable requirements of this Chapter and Chapter 143, Zoning:
- (1) Re-grading of lands.
 - (2) Earthen fill.
 - (3) Parking lots.
 - (4) Removal of vegetation as part of a floodplain enhancement plan made part of a land development application.
 - (5) Retaining walls.
 - (6) Roads or driveways.
 - (7) Stormwater basins and stormwater outfall structures.
- B. The following uses are permitted by conditional use in the FCD, except the floodway. The establishment of these uses shall be in compliance with the applicable requirements of this Chapter and Chapter 143, Zoning:
- (1) Recreational trails.
 - (2) Public sewer and/or water lines and public utility transmission lines running along the corridor.

§86-403. Additional Requirements of Proof to Qualify for Conditional Use Approval.

- A. The stormwater storage volume is the amount of stormwater held within the floodplain area on the site up the RFE. There shall be no net decrease of the stormwater storage volume in the FCD caused by any proposed activity seeking conditional use approval.
- B. There shall be no calculated increase in flood height at either the up or down stream project boundary. Evidence confirming this fact shall be provided through a hydrologic and hydraulic analyses conducted in accordance with the provisions of this Chapter.
- C. The cross section of any watercourse shall not be altered to the extent that there will be any expansion of the floodplain area onto any adjacent lands, including public rights-of-way, without the grant of easement from the adjoining owner.

- D. A LOMR will be required from FEMA prior to occupancy of any new structure or land, removed from the FCD by virtue of a fill activity.
- E. The placement of public sewer and/or water lines and public utility transmission lines within the FCD shall meet the applicable riparian buffer standards set forth in Chapter 143, Zoning, of the Code of the Township of Lower Providence.

§86-404. Conditional Use Procedures.

An applicant seeking approval for a conditional use as set forth and regulated in this Chapter shall be required to request and obtain approval of a conditional use according to the provisions for a conditional use set forth in this Chapter and Chapter 143, Zoning, of the Code of the Township of Lower Providence.

§86-405. Nonconforming Structures and Uses in the FCD.

The provisions of this Chapter do not require any changes or improvements to be made to lawfully existing structures. However, when an improvement is made to any existing structure, the provisions set forth in this Part and those concerning nonconformities in Chapter 143, Zoning, of the Code of the Township of Lower Providence shall apply.

§86-406. Improvements to Existing Structures in the FCD.

The following provisions shall apply whenever any improvement is made to an existing structure located within the FCD:

- A. No expansion or enlargement of an existing structure shall be allowed within any floodway.
- B. No expansion or enlargement of an existing structure shall be undertaken in the direction of the floodway.
- C. Any substantial improvement to an existing structure shall be undertaken only if the entire structure is elevated, or in the case of a non-residential structure, floodproofed to one and one-half (1½) feet above BFE and there is no increase in the BFE.
- D. Historic Structures.
 - (1) Historic structures undergoing repair or rehabilitation that constitute a substantial improvement must comply with all of this Chapter's requirements that do not preclude the structure's continued designation as an historic structure. Documentation that a specific requirement of this Chapter will cause removal of the structure from the National Register of Historic Places or the State Inventory

of Historic Places must be obtained from the Secretary of the Interior or the State Historic Preservation Officer. Any exemption from this Chapter's requirements will be the minimum necessary to preserve the historic character and design of the structure.

- (2) Historic structures undergoing repair or rehabilitation shall also address the requirements of Title 34 of the Pennsylvania Code, the 2009 IBC, and/or the 2009 IRC, or latest revisions thereof.
- E. Any modification, alteration, reconstruction, or improvement of any kind that constitutes a repetitive loss shall be undertaken only in full compliance with the provisions of this Chapter.

PART 5

VARIANCES AND SPECIAL REQUIREMENTS

§86-500. General.

If compliance with any of the requirements of this Chapter would result in an exceptional hardship to a prospective builder, developer, or landowner, the LPT ZHB may, upon request, grant relief from the strict application of these requirements, except where specifically prohibited by this Chapter.

§86-501. Variance Procedures and Conditions.

- A. An applicant seeking approval for a variance as set forth and regulated in this Chapter shall be required to request and obtain approval of a variance according to the provisions for a variance set forth in this Chapter and Chapter 143, Zoning, of the Code of the Township of Lower Providence.
- B. All variance applications shall be forwarded to the LPT ZHB, along with any required studies or information supplied by the applicant.
- C. No variance shall be granted for any construction, development, use, or activity within any area of floodway that would cause any increase in the BFE as shown by hydrologic and hydraulic analyses conducted in accordance with this Chapter.
- D. No variance shall be granted for any construction, development, use, or activity within any Zone AE or Zone A that would, together with all other existing and anticipated development, increase the BFE more than one (1) foot at any location.

- E. No variance shall be granted for any of the other requirements pertaining specifically to development regulated by Parts 6 and 7 of this Chapter, concerning *Special Technical Requirements* or *Development Which May Endanger Human Life*.

§86-502. Special Requirements for Subdivisions.

- A. All subdivision proposals and development proposals involving at least fifty (50) lots or dwelling units, or at least five (5) acres, whichever is the lesser, and are located entirely or in part in flood hazard areas where BFE data are not available, shall provide hydrologic and hydraulic analyses conducted in accordance with this Chapter that determine BFEs and floodway information for the site. The analyses shall be prepared by a licensed professional engineer in a format required by FEMA for a CLOMR or LOMR.
- B. For subdivision proposals and development proposals involving less than fifty (50) lots or dwelling units and which are located entirely or in part in flood hazard areas where BFE data are not available, determination of floodplain applicability shall be undertaken by the Floodplain Administrator who shall rely on the then current FEMA floodplain mapping, hydrologic and hydraulic analyses conducted in accordance with this Chapter, and/or other documentation provided by the applicant.

§86-503. Special Requirements for Manufactured Homes.

- A. Within the FCD, manufactured homes shall be prohibited within the area measured fifty (50) feet landward from the top-of-bank of any watercourse.
- B. Where permitted by variance within the FCD, all manufactured homes, and any improvements thereto, shall be:
- (1) Placed on a permanent foundation;
 - (2) Elevated so that the lowest floor of the manufactured home is at least one and one-half (1½) feet above the BFE; and
 - (3) Anchored to resist flotation, collapse, or lateral movement.
- C. Installation of manufactured homes shall be done in accordance with the manufacturers' installation instructions as provided by the manufacturer. Where the applicant cannot provide the above information, the requirements of Appendix E of the 2009 IRC or the US HUD's Permanent Foundations for Manufactured Housing, 1984 Edition, draft or latest revision thereto, shall apply, as well as 34 PA Code Chapters 401-405.
- D. Consideration shall be given to the installation requirements of the 2009 IBC and the 2009 IRC, or the most recent revisions thereto, as well as Title 34 of the Pennsylvania Code, as amended, where appropriate and/or applicable to units where the manufacturers'

standards for anchoring cannot be provided or were not established for the proposed installation.

§86-504. Special Requirements for Recreational Vehicles.

Recreational vehicles in Zone AE must either:

- A. Be on the site for fewer than one hundred eighty (180) consecutive days; and be fully licensed and ready for highway use; or
- B. Meet the special requirements for manufactured homes set forth in this Part.

§86-505. Variance Conditions.

- A. If granted, a variance shall only provide the least modification necessary to provide relief.
- B. In granting any variance, the LPT ZHB shall attach the conditions and safeguards outlined in Part 6 applicable to the proposal. These conditions and safeguards are necessary in order to protect the public health, safety, and welfare of the residents of Lower Providence Township. In addition, the LPT ZHB may attached any additional reasonable conditions it believes are necessary to protect the public health, safety, and welfare in accordance with the MPC.
- C. Whenever a variance is granted, the LPT ZHB shall notify the applicant in writing that:
 - (1) The granting of the variance may result in increased premium rates for flood insurance; and
 - (2) Such variances may increase the risks to life and property.
- D. In reviewing any request for a variance, the LPT ZHB shall consider, at a minimum, the following:
 - (1) That there is good and sufficient cause to grant the variance, including:
 - (a) That there are unique physical circumstances or conditions, including irregularity, narrowness, or shallowness of lot size or shape, or exceptional topographical or other physical conditions peculiar to the particular property and that the unnecessary hardship is due to such conditions and not the circumstances or conditions generally created by the provisions of this Chapter in the neighborhood or zoning district in which the property is located.

- (b) That because of such physical circumstances or conditions, there is no possibility that the property can be developed in strict conformity with the provisions of this Chapter and that the authorization of a variance is therefore necessary to enable the reasonable use of the property.
 - (c) That such unnecessary hardship has not been created by the applicant.
 - (d) That the variance, if authorized, will not alter the essential character of the neighborhood or zoning district in which the property is located, nor substantially or permanently impair the appropriate use or development of adjacent property, nor be detrimental to the public welfare.
- (2) That failure to grant the variance would result in exceptional hardship to the applicant.
- (3) That the granting of the variance will:
 - (a) Neither result in a prohibited increase in flood heights, additional threats to public safety, or extraordinary public expense;
 - (b) Nor create nuisances, cause fraud on, or victimize the public, or conflict with any other applicable state or local ordinances and regulations.
- E. A complete record of all variance requests and related actions shall be maintained by the Township. In addition, a report of all variances granted during the previous two years shall be included in the biennial report to FEMA.

PART 6

TECHNICAL PROVISIONS

§86-600. Technical Provisions in the Event of a Variance Being Granted.

In conjunction with the granting any variance, the Township shall attach the following technical provisions to the proposal for which the variance has been granted. These conditions and safeguards are necessary in order to protect the public health, safety, and welfare of the residents of Lower Providence Township.

A. Pertaining to the Alteration or Relocation of Watercourse.

- (1) 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 (1st) obtained from PA DEP Regional Office.

- (2) No encroachment, alteration, or improvement of any kind shall be made to any watercourse unless it can be shown that the activity will not reduce or impede the flood carrying capacity of the watercourse in any way.
- (3) In addition, FEMA and PA DCED, shall be notified prior to any alteration or relocation of any watercourse.

B. The Township shall require technical or scientific data to be submitted to FEMA for a LOMR within six (6) months of the completion of any new construction, development, or other activity resulting in changes in the BFE. A LOMR or CLOMR is required for:

- (1) Any proposed development that causes a rise in the BFEs within the floodway; or
- (2) Any proposed development occurring in Zone AE, which will cause a rise of more than one (1) foot in the BFE; or,
- (3) Proposed alteration or relocation of a watercourse including, but not limited, to the installation of culverts and bridges.

§86-601. Elevation and Floodproofing Requirements.

A. Residential Structures.

- (1) In Zone AE, any new construction or substantial improvement shall have the lowest habitable floor elevated one and one-half (1½) feet above the BFE (basements are prohibited).
- (2) In the Zone A, where there are no BFEs specified on the FIRMs, any new construction or substantial improvement shall have the lowest habitable floor elevated one and one-half (1½) feet above the BFE determined in accordance with Part 3 of this Chapter relating to the *A Zone*.
- (3) In all other areas of the FCD, any new construction or substantial improvement shall have the lowest habitable floor elevated one and one-half (1½) feet above the BFE as determined in accordance with this Chapter or above the highest adjacent grade, whichever has the higher elevation.
- (4) The design and construction standards and specifications contained in the 2009 IBC and in the 2009 IRC, or the most recent revisions thereof; ASCE 24; and 34 PA Code Chapters 401-405, as amended, shall be utilized.

B. Non-Residential Structures.

- (1) In Zone AE, any new construction or substantial improvement of a non-residential structure shall have the lowest habitable floor elevated one and one-half (1½) feet above the BFE, and be designed and constructed so that the space enclosed below the RFE:
 - (a) Is floodproofed so that the structure is watertight with walls substantially impermeable to the passage of water; and
 - (b) Has structural components with the capability of resisting hydrostatic and hydrodynamic loads and effects of buoyancy.
- (2) In Zone A, where there are no BFEs are specified on the FIRMs, any new construction or substantial improvement shall have the basement floodproofed and the lowest habitable floor elevated one and one-half (1½) feet above the BFE determined in accordance with Part 3 of this Chapter relating to the *A Zone*.
- (3) In all other areas of the FCD, any new construction or substantial improvement shall have the basement floodproofed and lowest habitable floor elevated one and one-half (1½) feet above the BFE as determined in accordance with this Chapter or above the highest adjacent grade, whichever has the higher elevation.
- (4) Any non-residential structure, or part thereof, made watertight below the RFE shall be floodproofed in accordance with the WI or W2 space classification standards contained in the publication entitled "Flood-Proofing Regulations" published by the US ACE (June 1972, as amended March 1992) or with some other approved equivalent standard. All plans and specifications for such floodproofing shall be accompanied by a statement certified by a licensed professional engineer or architect which states that the proposed design and methods of construction are in conformance with the above referenced standards.
- (5) The design and construction standards and specifications contained in the 2009 IBC and in the 2009 IRC, or the most recent revisions thereof; ASCE 24; and 34 PA Code Chapters 401-405, as amended, shall be used.

C. Space Below the Lowest Floor.

- (1) A fully enclosed space below the lowest floor (excluding basements) 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 floodwaters for the purpose of equalizing hydrostatic forces on exterior walls. The term "fully enclosed space" also includes crawl spaces.

- (2) Designs for meeting this requirement in Subsection (1) above must either be certified by a licensed professional engineer or architect, or meet or exceed the following minimum criteria:
- (a) Minimum of two (2) openings having a net total area of not less than one (1) square inch for every one (1) square foot of enclosed space;
 - (b) The bottom of all openings shall be no higher than one (1) foot above grade; and
 - (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.

D. Accessory Structures.

- (1) Accessory structures need not be elevated or floodproofed to remain dry, but shall comply, at a minimum, with the following requirements:
- (a) The structure shall not be designed or used for human habitation, but shall be limited to the parking of vehicles, or to the storage of tools, material, and equipment related to the principal use or activity on the property;
 - (b) Floor area shall not exceed one hundred (100) square feet;
 - (c) The structure will have a low damage potential;
 - (d) The structure will be located on the site so as to cause the least obstruction to the flow of floodwaters;
 - (e) Power lines, wiring, and outlets will be elevated to the RFE;
 - (f) Permanently affixed utility equipment and appliances such as furnaces, heaters, washers, dryers, etc., are prohibited;
 - (g) Sanitary facilities are prohibited; and
 - (h) The structure shall be adequately anchored to prevent flotation or movement and shall be designed to automatically provide for the entry and exit of floodwater for the purpose of equalizing hydrostatic forces on the walls. Designs for meeting this requirement must either be certified by a licensed professional engineer or architect, or meet or exceed the following minimum criteria:

- [1] A minimum of two (2) openings having a net total area of not less than one (1) square inch for every one (1) square foot of enclosed space;
- [2] The bottom of all openings shall be no higher than one (1) foot above grade; and
- [3] Openings may be equipped with screens, louvers, etc., or other coverings or devices, provided that they permit the automatic entry and exit of floodwaters.

§86-602. Special Technical Requirements.

A. Development Which May Endanger Human Life. In accordance with the Pennsylvania Flood Plain Management Act (Act 166 of 1978), and the regulations adopted by PA DCED as required by the Pennsylvania Flood Plain Management Act (Act 166 of 1978), any new or substantially improved structure which will be used for the production or storage of any of the following dangerous materials or substances; or, will be used for any activity requiring the maintenance of a supply of more than five hundred fifty (550) gallons, or other comparable volume, of any of the following dangerous materials or substances on the premises; or, will involve the production, storage, or use of any amount of radioactive substances; shall be subject to the provisions of this Section, in addition to all other applicable provisions. The following list of materials and substances are considered dangerous to human life:

- (1) Acetone;
- (2) Ammonia;
- (3) Benzene;
- (4) Calcium carbide;
- (5) Carbon disulfide;
- (6) Celluloid;
- (7) Chlorine;
- (8) Hydrochloric acid;
- (9) Hydrocyanic acid;
- (10) Magnesium;

- (11) Nitric acid and oxides of nitrogen;
 - (12) Petroleum products (gasoline, fuel oil, etc.);
 - (13) Phosphorus;
 - (14) Potassium;
 - (15) Sodium;
 - (16) Sulphur and Sulphur products;
 - (17) Pesticides (including insecticides, fungicides, and rodenticides); and
 - (18) Radioactive substances, insofar as such substances are not otherwise regulated.
- B. Within the FCD, any structure of the kind described in Subsection A., above, shall be prohibited. No variance shall be granted to permit any such structure, or part thereof, within a floodway.
- C. Where permitted by a variance within the floodplain fringe and alluvial soils area, any new or substantially improved structure of the kind described in Subsection A above shall be:
- (1) Elevated or designed and constructed to remain completely dry up to at least one and one-half (1½) feet above the BFE;
 - (2) Designed to prevent pollution from the structure or activity during the course of a base flood; and
 - (3) Any such non-residential structure, or part thereof, that will be built below the RFE shall be designed and constructed in accordance with the standards for completely dry floodproofing contained in the publication "Flood-Proofing Regulations" (US ACE, June 1972 as amended March 1992), or with some other equivalent watertight standard.

§86-603. Design and Construction Standards.

The following minimum standards shall apply for all construction and development proposed within the FCD:

- A. Fill. If fill is used, it shall:
- (1) Extend laterally at least fifteen (15) feet beyond the building line from all points;

- (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 data justifying steeper slopes and substantiated by a licensed engineer are submitted to, and approved by the Floodplain Administrator, at his/her discretion; and
 - (5) Be used to the extent to which it does not adversely affect adjacent properties.
- B. Drainage Facilities. Storm drainage facilities shall be designed to convey the flow of stormwater runoff in a safe and efficient manner. Such facilities shall insure proper drainage along streets, and provide positive drainage away from buildings. The facilities shall also be designed to prevent the discharge of excess runoff onto adjacent properties.
- C. Water and Sanitary Sewer Facilities and Systems.
- (1) All new or replacement water supply and sanitary sewer facilities and systems shall be located, designed, and constructed to minimize or eliminate flood damages and the infiltration of floodwaters.
 - (2) Sanitary sewer facilities and systems shall be designed to prevent the discharge of untreated sewage into floodwaters.
 - (3) No part of any on-site sewage system shall be located within the FCD except in strict compliance with all state and local regulations 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.
 - (4) The design and construction provisions of the UCC and FEMA #348, "Protecting Building Utilities from Flood Damages" and "The International Private Sewage Disposal Code" shall be utilized and complied with.
- D. Other Utilities. All other utilities, such as gas lines, electrical systems, and telephone systems, shall be located, elevated (where possible), and constructed to minimize the chance of impairment during a flood.
- E. Streets. The finished elevation of all new streets shall be less than the RFE.
- F. Storage. All materials that are buoyant, flammable, explosive, or in times of flooding could be injurious to human, animal, or plant life, and not listed in Part 6 relating to *Development Which May Endanger Human Life in Special Technical Requirements* shall be stored at or above the RFE and/or floodproofed to the maximum extent possible.

G. Placement of Buildings and Structures. All buildings and structures shall be designed, located, and constructed so as to offer no obstruction to the flow of water and shall be designed to have no effect upon the flow and height of floodwater.

H. Anchoring.

- (1) All buildings and structures shall be firmly anchored in accordance with accepted engineering practices to prevent flotation, collapse, or lateral movement.
- (2) All air ducts, large pipes, storage tanks, and other similar objects or components located below the RFE shall be securely anchored or affixed to prevent flotation.

I. Floors, Walls, and Ceilings.

- (1) Wood flooring used at or below the RFE shall be installed to accommodate a lateral expansion of the flooring, perpendicular to the flooring grain without causing structural damage to the building.
- (2) Plywood used at or below the RFE shall be of a “marine” or “water-resistant” variety.
- (3) Walls and ceilings at or below the RFE shall be designed and constructed of materials that are “water-resistant” and will withstand inundation.
- (4) Windows, doors, and other components at or below the RFE shall be made of metal or other “water-resistant” material.

J. Paints and Adhesives.

- (1) Paints and other finishes used at or below the RFE shall be of “marine” or “water-resistant” variety.
- (2) Adhesives used at or below the RFE shall be of a “marine” or “water-resistant” variety.
- (3) All wooden components (doors, trim, cabinets, etc.) shall be finished with a “marine” or “water-resistant” paint or other finishing material.

K. Electrical Components.

- (1) Electrical distribution panels shall be at least three (3) feet above the BFE.
- (2) Separate electrical circuits shall serve lower levels and shall be dropped from above.

- L. Equipment. Water heaters; furnaces; air conditioning and ventilating units; and other electrical, mechanical, or utility equipment or apparatus shall not be located below the RFE.
- M. Fuel Supply Systems. All gas and oil supply systems shall be designed to prevent the infiltration of floodwaters into the system and discharges from the system into floodwaters. Additional provisions shall be made for the drainage of these systems in the event that floodwater infiltration occurs.
- N. UCC Coordination. The standards and specifications contained in 34 PA Code Chapters 401-405, as amended, including, but not limited to the following provisions, shall apply to the above and other sections and subsections of this Chapter, to the extent that they are more restrictive and/or supplement the requirements of this Chapter.
 - (1) IBC 2009 or the latest edition thereof: Sections 801, 1202, 1403, 1603, 1605, 1612, 3402, and Appendix G.
 - (2) IRC 2009 or the latest edition thereof: Sections R104, R105, R109, R323, Appendix AE101, Appendix E and Appendix J.

PART 7

ACTIVITIES REQUIRING SPECIAL FLOODPLAIN PERMITS

§86-700. General.

In accordance with the administrative regulations promulgated by PA DCED to implement the Pennsylvania Flood Plain Management Act (Act 166 of 1978), the following activities shall be prohibited within the FCD unless a special floodplain permit has been issued by the Township. In order to apply for a special floodplain permit, a variance must first be obtained, as outlined in Part 5 of this Chapter.

- A. The commencement of any of the following activities; or the construction, enlargement, or expansion of any structure used, or intended to be used, for any of the following activities:
 - (1) Hospitals;
 - (2) Nursing homes; and
 - (3) Jails or prisons.

- B. The commencement of, or any construction of, a new manufactured home park or manufactured home subdivision, or substantial improvement to an existing manufactured home park or manufactured home subdivision.

§86-701. Application Requirements for Special Floodplain Permits.

Applicants for special floodplain permits shall provide five (5) copies of the following items:

- A. A written request including a completed special floodplain permit application form;
- B. A small scale map showing the vicinity in which the proposed site is located;
- C. A plan of the entire site, clearly and legibly drawn at a scale of one (1) inch being equal to one hundred (100) feet or less, showing the following:
 - (1) North arrow, scale and date;
 - (2) Topography based upon the NAVD of 1988, showing existing and proposed contours at intervals of two (2) feet;
 - (3) All property and lot lines including dimensions, and the size of the site expressed in acres or square feet;
 - (4) The location of all existing streets, drives, other access ways, and parking areas, with information concerning widths, pavement types and construction, and elevations;
 - (5) The location of any existing bodies of water or watercourses; buildings; structures and other public or private facilities, including railroad tracks and facilities; and any other natural and man-made features affecting, or affected by, the proposed activity or development;
 - (6) The location of the floodplain boundary line, information and spot elevations concerning the BFE, and information concerning the flow of water including direction and velocities;
 - (7) The location of all proposed buildings, structures, utilities, and any other improvements; and
 - (8) Any other information which the Township considers necessary for adequate review of the application.
- D. Plans of all proposed buildings, structures and other improvements, clearly and legibly drawn at suitable scale showing the following:

- (1) Sufficiently detailed architectural or engineering drawings, including floor plans, sections, and exterior building elevations, as appropriate;
- (2) For any proposed building, the elevation of the lowest floor and, as required, the elevation of any other floor;
- (3) Complete information concerning flood depths, pressures, velocities, impact and uplift forces, and other factors associated with the base flood;
- (4) Detailed information concerning any proposed floodproofing measures;
- (5) Cross section drawings for all proposed streets, drives, other access ways, and parking areas, showing all rights-of-way and pavement widths;
- (6) Profile drawings for all proposed streets, drives, and access ways including existing and proposed grades; and
- (7) Plans and profiles of all proposed sanitary and storm sewer systems, water supply systems, and any other utilities or facilities.

E. The following data and documentation:

- (1) Certification from the applicant that the site upon which the activity or development is proposed is an existing separate and single parcel, owned by the applicant;
- (2) Certification from a licensed professional engineer, architect, or landscape architect that the proposed construction has been adequately designed to protect against damage from the base flood;
- (3) A statement, certified by a licensed professional engineer, architect, landscape architect, or other qualified person which contains a complete and accurate description of the nature and extent of pollution that might possibly occur from the development during the course of a base flood, including a statement concerning the effects such pollution may have on human life;
- (4) A statement, certified by a licensed professional engineer, architect, or landscape architect, which contains a complete and accurate description of the effects the proposed development will have on base floods and flows;
- (5) A statement, certified by a licensed professional engineer, architect, or landscape architect, which contains a complete and accurate description of the kinds and amounts of any loose buoyant materials or debris that may possibly exist or be located on the site below the BFE and the effects such materials and debris may have on base floods and flows;

- (6) The appropriate component of PA DEP's "Planning Module for Land Development";
- (7) Where any excavation or grading is proposed, a plan meeting the requirements of PA DEP and MCCD to implement and maintain erosion and sedimentation control;
- (8) Any other applicable permits such as, but not limited to, a permit for any activity regulated by PA DEP under Section 302 of Act 1978 of 166; and
- (9) An evacuation plan which fully explains the manner in which the site will be safely evacuated before or during the course of a base flood.

§86-702. Application Review Procedures.

Upon receipt of an application for a special floodplain permit by the Township, the following procedures shall apply in addition to those of Part 8 of this Chapter:

- A. Within three (3) working days following receipt of the application, a complete copy of the application and all accompanying documentation shall be forwarded to the MCPC by registered or certified mail for its review and recommendations. Copies of the application shall also be forwarded to the LPT PC and Township Engineer for review and comment.
- B. If an application is received that is incomplete, the Township shall return the application and notify the applicant in writing, stating in what respect(s) the application is deficient.
- C. If the Township decides to disapprove an application, it shall notify the applicant, in writing, of the reasons for the disapproval.
- D. If the Township approves an application, it shall file written notification, together with the application and all pertinent information, with PA DCED, by registered or certified mail, within five (5) working days after the date of approval.
- E. Before issuing the special floodplain permit, the Township shall allow PA DCED thirty (30) days, after receipt of the notification by the Department, to review the application and decision made by the Township.
- F. If the Township does not receive any communication from PA DCED during the thirty (30) day review period, it may issue a special floodplain permit to the applicant.
- G. If PA DCED should decide to disapprove an application, it shall notify the Township and the applicant, in writing, of the reasons for the disapproval, and the Township shall not issue the special floodplain permit.

§86-703. Special Technical Requirements.

In addition to the requirements set forth in Part 6 of this Chapter, the following minimum requirements shall also apply to any proposed development requiring a special floodplain permit.

- A. No application for a special floodplain permit shall be approved unless it can be determined that the structure or activity will be located, constructed, and maintained in a manner which will:
 - (1) Fully protect the health and safety of the general public and any occupants of the structure. At a minimum, all new structures shall be designed, located, and constructed so that:
 - (a) The structure will survive inundation by waters of the base flood without any lateral movement or damage to either the structure itself, or to any of its equipment or contents below the BFE.
 - (b) The lowest floor will be elevated to at least one and one-half (1½) feet above the BFE.
 - (c) The occupants of the structure can remain inside for an indefinite period of time and be safely evacuated at any time during a base flood.
 - (2) Prevent any significant possibility of pollution, increased flood levels or flows, or debris endangering life and property.
- B. A hydrologic and hydraulic analysis in accordance with Part 1 of this Chapter relating to *Hydrologic and Hydraulic Analyses in Applicability* shall be provided.

PART 8

ADMINISTRATION

§86-800. Designation of the Floodplain Administrator.

The Township Zoning Officer within the is hereby appointed to administer and enforce this Chapter and is referred to herein as the Floodplain Administrator.

§86-801. Floodplain Permits Required.

A floodplain permit shall be required before any construction or development is undertaken within the FCD. A floodplain permit shall not be required, however, for minor repairs to existing buildings or structures. In the case of a proposed hospital, nursing home, jail, prison, or manufactured home park, the floodplain permit referred to here would be the special floodplain permit set forth in Part 7 of this Chapter.

§86-802. Duties and Responsibilities of the Floodplain Administrator.

- A. The Floodplain Administrator shall issue a floodplain permit only after it has been determined that the proposed work to be undertaken will be in conformance with the requirements of this Chapter and all other applicable chapters, codes, and ordinances.
- B. Prior to the issuance of any floodplain permit, the Floodplain Administrator shall review the application for the permit to determine if all other necessary government permits required by state and federal laws have been obtained, such as those required by the Pennsylvania Sewage Facilities Act (Act 1966 of 537, as amended); the Pennsylvania Dam Safety and Encroachments Act (Act 1978 of 325, as amended); the Pennsylvania Clean Streams Act (Act 1937 of 394, as amended); and the U.S. Clean Water Act, Section 404, 33 U.S.C. §1344. No floodplain permit shall be issued until the Floodplain Administrator has determined that all such permits have been obtained.
- C. In the case of existing structures, prior to the issuance of any building permit, the Floodplain Administrator shall review the history of repairs to the subject building, so that any repetitive loss issues can be addressed before the permit is issued.
- D. During the construction period, the Floodplain Administrator or other authorized official shall inspect the premises to determine that the work is progressing in compliance with the information provided on the floodplain permit application and with all applicable laws, codes, and ordinances. The Floodplain Administrator shall make as many inspections during and upon completion of the work as are necessary.
- E. In the discharge of his duties, the Floodplain Administrator shall have the authority to enter any building, structure, premises, or development in the FCD, upon presentation of proper credentials, at any reasonable hour to enforce the provisions of this Chapter.
- F. In the event the Floodplain Administrator discovers that the work does not comply with the floodplain permit application or any applicable laws, codes, and/or ordinances, or that there has been a false statement or misrepresentation by the applicant, the Floodplain Administrator shall revoke the floodplain permit and report such fact to the LPT BOS for whatever action it considers necessary.
- G. The Floodplain Administrator shall maintain all records associated with the requirements of this Chapter in accordance with State law.

- H. The Floodplain Administrator shall consider the requirements of Title 34 of the Pennsylvania Code and the 2009 IBC and the 2009 IRC or latest revisions thereof when making any determinations or undertaken any action pursuant to this Chapter.

§86-803. Application Procedures and Requirements.

- A. Application for a floodplain permit shall be made, in writing, to the Floodplain Administrator on forms supplied by the Township. Such application shall contain the following:
- (1) Name and address of the applicant;
 - (2) Name and address of the record owner of land on which proposed construction is to occur;
 - (3) Name and address of the contractor which will undertake the work;
 - (4) Site location, including the street address and the county parcel identification number;
 - (5) Listing of all other Township, County, State, and Federal approvals, permits, waivers, and/or variances required; and
 - (6) Brief description of proposed work and estimated cost, including a breakout of flood-related cost and the market value of the building before the flood damage occurred, where appropriate.
- B. If any proposed construction or development is located entirely or partially within the FCD, applicants for floodplain permits shall provide all the necessary information in sufficient detail and clarity to enable the Floodplain Administrator to determine that:
- (1) the proposal is consistent with the need to minimize flood damage and conform with the requirements of this Chapter and all other applicable chapters, codes, and ordinances;
 - (2) All utilities and facilities, such as sewer, gas, electrical and water systems are located and constructed to minimize or eliminate flood damage and in accordance with the provisions this Chapter;
 - (3) Adequate drainage is provided so as to reduce exposure to flood hazards;
 - (4) Structures will be anchored to prevent floatation, collapse, or lateral movement;
 - (5) Building materials are flood-resistant;

- (6) Appropriate practices that minimize flood damage will be used; and
 - (7) Electrical, heating, ventilation, plumbing, air conditioning equipment, and other service facilities have been designed and/or located to prevent water entry or accumulation.
- C. Applicants shall file the following minimum information, plus any other pertinent information as may be required by the Floodplain Administrator, to make the above determination:
- (1) A completed floodplain permit application form;
 - (2) A plan of the entire site, clearly and legibly drawn at a scale of one (1) inch being equal to one hundred (100) feet or less, showing the following:
 - (a) North arrow, scale, and date;
 - (b) Topographic contour lines, if available;
 - (c) The location of all existing and proposed buildings, structures, and other improvements, including the location of any existing or proposed subdivision and development;
 - (d) The location of all existing streets, drives, and other access ways; and
 - (e) The location of any existing bodies of water or watercourses, the FCD, and, if available, information pertaining to the floodway, and the flow of water including direction and velocities.
 - (3) Plans of all proposed buildings, structures, and other improvements, drawn at a scale of one (1) inch being equal to one hundred (100) feet or less showing the following:
 - (a) The proposed lowest floor elevation of any proposed building based NAVD of 1988;
 - (b) The BFE;
 - (c) Supplemental information as may be necessary under Title 34 of the Pennsylvania Code, the 2009 IBC, and/or the 2009 IRC, or latest revisions thereof.
 - (4) The following data and documentation:
 - (a) If available, information concerning flood depths, pressures, velocities, impact and uplift forces, and other factors associated with a base flood;

and detailed information concerning any proposed floodproofing measures and corresponding elevations.

- (b) Documentation, certified by a licensed professional engineer or architect, showing that the cumulative effect of any proposed development within Zone AE when combined with all other existing and anticipated development, will not increase the BFE more than one (1) foot at any point.
 - (c) A document, certified by a licensed professional engineer or architect, which states that the proposed construction or development has been adequately designed to withstand the pressures, velocities, and impact and uplift forces associated with the base flood. Such statement shall include a description of the type and extent of floodproofing measures which have been incorporated into the design of the structure and/or the development.
 - (d) Detailed information needed to determine compliance with the regulations set forth in Part 6 of this Chapter relating to *Storage in Design and Construction Standards and Development Which May Endanger Human Life in Special Technical Requirements* including:
 - [1] The amount, location and purpose of any materials or substances referred to in Part 6 relating to *Storage in Design and Construction Standards and Development Which May Endanger Human Life in Special Technical Requirements* which are intended to be used, produced, stored or otherwise maintained on site; and
 - [2] A description of the safeguards incorporated into the design of the proposed structure to prevent leaks or spills of the dangerous materials or substances listed in Part 6 relating to *Development Which May Endanger Human Life in Special Technical Requirements* during a base flood.
 - (e) The appropriate component of PA DEP's "Planning Module for Land Development."
 - (f) Where any excavation or grading is proposed, a plan meeting the requirements of PA DEP and MCCD, to implement and maintain erosion and sedimentation control.
- (5) Applications for permits shall be accompanied by a fee as set forth in this Part.

§86-804. Review by MCCD.

A copy of all applications and plans for any proposed construction or development in the FCD to be considered for approval shall be submitted by the Floodplain Administrator to the MCCD for review and comment prior to the issuance of a floodplain permit. The recommendations of the MCCD shall be considered by the Floodplain Administrator for possible incorporation into the proposed plan.

§86-805. Review of Application by Others.

A copy of all plans and applications for any proposed construction or development in the FCD to be considered for approval may be submitted by the Floodplain Administrator to any other appropriate agencies and/or individuals (e.g. LPT PC, Township Engineer, etc.) for review and comment.

§86-806. Changes.

After the issuance of a floodplain permit by the Floodplain Administrator, no changes of any kind shall be made to the application, permit or any of the plans, specifications, or other documents submitted with the application without the written consent or approval of the Floodplain Administrator. Requests for any such change shall be in writing, and shall be submitted by the applicant to Floodplain Administrator for consideration.

§86-807. Placards.

In addition to the floodplain permit, the Floodplain Administrator shall issue a placard which shall be displayed on the premises during the time construction is in progress. This placard shall show the number of the permit, the date of its issuance, and be signed by the Floodplain Administrator.

§86-808. Start of Construction.

Work on the proposed construction shall begin within one hundred eighty (180) days after the date of floodplain permit issuance and shall be completed within twelve (12) months after the date of issuance of the permit; otherwise the permit shall expire unless a time extension is granted, in writing, by the Floodplain Administrator. The term "start of construction" shall be understood as defined in Part 2 of this Chapter . Time extensions shall be granted only if a written request is submitted by the applicant, which sets forth sufficient and reasonable cause for the Floodplain Administrator to approve such a request and the original permit is compliant with the ordinance and FIRM/FIS in effect at the time the extension is granted.

§86-809. Enforcement.

A. Notices. Whenever the Floodplain Administrator or other authorized Township representative determines that there are reasonable grounds to believe that there has been a violation of any provisions of this Chapter, or of any regulations adopted pursuant thereto, the Floodplain Administrator shall give notice of such alleged violation as hereinafter provided. At a minimum, such enforcement notice shall state the following:

- (1) The name of the owner of record and any other person against whom the Township intends to take action.
- (2) The location of the property in violation.
- (3) The specific violation with a description of the requirements which have not been met, citing in each instance the applicable provisions of this Chapter.
- (4) The date before which the steps for compliance must be commenced and the date before which the steps must be completed.
- (5) That the recipient of the notice has the right to appeal to the LPT ZHB within 30 days in accordance with procedures set forth in this Part.
- (6) That failure to comply with the notice within the time specified, unless extended by appeal to the LPT ZHB, constitutes a violation, with possible sanctions clearly described.

B. Penalties.

- (1) Any person who fails to comply with any or all of the requirements or provisions of this Chapter or who fails or refuses to comply with any notice, order or direction of the Floodplain Administrator or any other authorized employee of the Township shall pay a fine to the Township, of no more than five hundred dollars (\$500.00), plus costs of prosecution, including reasonable engineer and attorney fees. Each day that a violation continues shall constitute a separate violation.
- (2) In addition to the above penalties, all other actions are hereby reserved including an action in equity for the proper enforcement of this Chapter.
- (3) The imposition of a fine or penalty for any violation of, or noncompliance with, this Chapter shall not excuse the violation or noncompliance or permit it to continue and all such persons shall be required to correct or remedy such violations and noncompliance within a reasonable time.
- (4) Any development initiated or any structure or building constructed, reconstructed, enlarged, altered, or relocated, in noncompliance with this Chapter may be declared by LPT BOS to be a public nuisance and abated as such.

§86-810. Appeals.

- A. Any person aggrieved by any action, determination, or decision of the Floodplain Administrator concerning the administration of the provisions of this Chapter, may appeal such action, determination, or decision to the LPT ZHB. Such appeal must be filed, in writing, within thirty (30) days after the decision, determination, or action of the Floodplain Administrator.
- B. The LPT ZHB shall consider the appeal in accordance with the applicable provisions of the MPC.
- C. Appeals from the decision of the LPT ZHB shall be undertaken in accordance with the applicable provisions of the MPC.

§86-811. Fees.

- A. The LPT BOS shall establish, by resolution, a schedule of fees, charges, and expenses and collection procedures for applications for permits, conditional uses, variances, appeals, and other matters pertaining to this Chapter. This schedule may be altered or amended, from time to time by resolution of the LPT BOS.
- B. Until all application fees, charges, and expenses have been paid in full, any application or appeal filed under this Chapter shall not be considered complete. Therefore, no proceedings related to any such application or appeal shall be initiated, no established time elements shall begin to accrue, and no action shall be taken on any such application or appeal.

ARTICLE II SAVINGS CLAUSE

Nothing in this Ordinance, or in the Chapter 86, Floodplain Conservation and Damage Prevention, adopted hereby, shall be construed to affect any enforcement action, suit, or proceeding pending before any court or other legal body nor construed to affect any rights acquired, or liability incurred, or any cause or causes of action acquired or existing, under any act or ordinance hereby repealed by this Ordinance. Furthermore, no just or legal right or remedy of any character shall be lost, impaired, or affected by the adoption of this Ordinance.

ARTICLE III REPEALER

All other Township ordinances or parts of ordinances which are inconsistent herewith are hereby repealed but only to the extent of such conflict.

ARTICLE IV 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 Supervisors that this Ordinance would have been adopted had such unconstitutional, illegal or invalid sentence, clause, section or part thereof not been included herein.

ARTICLE V EFFECTIVE DATE

This Ordinance shall become effective five (5) days after final enactment.

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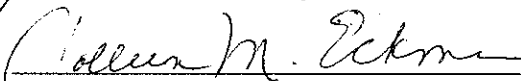
LOWER PROVIDENCE TOWNSHIP
Montgomery County, Pennsylvania

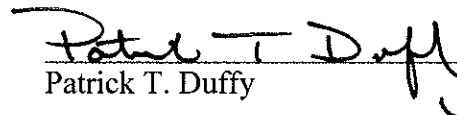
ORDINANCE #634
FLOODPLAIN ORDINANCE – Chapter 86
(Duly Adopted February 18, 2016)

ENACTED and ORDAINED this 18 day of February, A.D., 2016.

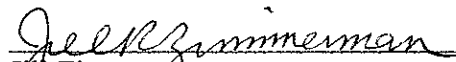
LOWER PROVIDENCE TOWNSHIP
BOARD OF SUPERVISORS:


Jason Sorgini, Chairperson

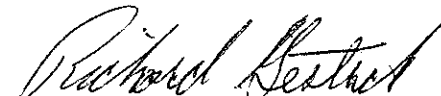

Colleen Eckman, Vice Chair


Patrick T. Duffy


Peter MacFarland


Jill Zimmerman

ATTEST:


Richard Gestrich, Township Manager