

Hickory Township Floodplain Ordinance

Meeting the minimum requirements of the National Flood Insurance Program and the Pennsylvania Flood Plain Management Act (1978-166) SECTION 60.3 (D):

ORDINANCE NO. 3 OF - 2011

An Ordinance of the Township of Hickory, Lawrence County, Pennsylvania, Requiring All Persons, Partnerships, Businesses, and Corporations To Obtain a Building Permit for Any Construction or Development within Areas Designated as Floodway Areas, Floodplain Areas, and Flood-Fringe Areas; Providing for the Issuance of Such Building Permits; Setting Forth Certain Minimum Requirements for New Construction and Development within Said Areas of the Township; and Establishing Penalties for failure or Refusal To Comply with the Requirements of this Ordinance.

Be it enacted and ordained by the Township of Hickory, Lawrence County, Pennsylvania, and it is hereby enacted and ordained by the authority of the same as follows:

Statutory Authorization

The Legislature of the Commonwealth of Pennsylvania has, by the passage of the Pennsylvania Flood Plain Management Act 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. Therefore, the Board of the Township of Hickory does hereby order as follows.

ARTICLE I - GENERAL PROVISIONS

Section 1.00 Intent

The intent of this Ordinance is to:

- A. Promote the general health, welfare, and safety of the community.
- B. Encourage the utilization of appropriate construction practices in order to prevent or minimize flood damage in the future.
- C. Minimize danger to public health by protecting water supply and natural drainage.
- D. Reduce financial burdens imposed on the community, its governmental units, and its residents, by preventing excessive development in areas subject to flooding.

Section 1.01 Applicability

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 Township unless a Building Permit has been obtained from the Floodplain Administrator.

A Building Permit shall not be required for minor repairs to existing buildings or structures.

Section 1.02 Abrogation and Greater Restrictions

This Ordinance supersedes any other conflicting provisions that may be in effect in identified floodplain areas. However, any other ordinance provisions shall remain in full force and effect to the extent that those provisions are more restrictive.

Section 1.03 Severability

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

Section 1.04 Warning and Disclaimer of Liability

The degree of flood protection sought by the provision of this Ordinance is considered reasonable for regulatory purposes and is based on acceptable engineering methods of study. Larger floods may occur. Flood heights may be increased by man-made or natural causes, such as ice jams and bridge openings restricted by debris. This ordinance does not imply that areas outside any identified floodplain area, or that land uses permitted within such areas will be free from flooding or flood damages. This Ordinance 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 Ordinance or any administrative decision lawfully made thereunder.

ARTICLE II – ADMINISTRATION

Section 2.00 Designation of the Floodplain Administrator

The Building Permit Officer is hereby appointed to administer and enforce this ordinance and is referred to herein as the Floodplain Administrator.

Section 2.01 Building Permits Required

Building Permits shall be required before any construction or development is undertaken within any area of the Township.

Section 2.02 Issuance of Building Permit

- A. The Floodplain Administrator shall issue a Building Permit only after it has been determined that the proposed work to be undertaken will be in conformance with the requirements of this and all other applicable codes and ordinances.
- B. Prior to the issuance of any building permit, the Floodplain Administrator shall review the application for permit to determine if all other necessary governmental permits required by State and Federal laws have been 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 U.S. Clean Water Act, Section 404, 33, U.S.C. 1334; and the Pennsylvania Clean Streams Act (Act 1937-94, as amended). No permit shall be issued until this determination has been made.
- C. 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 municipality and until all required permits or approvals have been first obtained from the Department of Environmental Protection.
- D. 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.
- E. In addition, the Federal Emergency Management Agency and Pennsylvania Department of Community and Economic Development, shall be notified by the municipality prior to any alteration or relocation of any watercourse.
- F. Technical or scientific data shall be submitted to FEMA for a Letter of Map Revision (LOMR) within six (6) months of the completion of any new construction, development, or other activity resulting in changes in the BFE.

Section 2.03 Application Procedures and Requirements

- A. Application for such a building 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 applicant.

2. Name and address of owner of land on which proposed construction is to occur.
 3. Name and address of contractor.
 4. Site location.
 5. Listing of other permits required.
 6. Brief description of proposed work and estimated cost.
 7. A plan of the site showing the exact size and location of the proposed construction as well as any existing buildings or structures.
- B. If any proposed construction or development is located entirely or partially within any identified floodplain area, applicants for Building Permits shall provide all the necessary information in sufficient detail and clarity to enable the Floodplain Administrator to determine that:
1. all such proposals are consistent with the need to minimize flood damage and conform with the requirements of this and all other applicable 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
 3. adequate drainage is provided so as to reduce exposure to flood hazards.
- 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 Building 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. all property and lot lines including dimensions, and the size of the site expressed in acres or square feet;
 - d. the location of all existing and proposed buildings, structures, and other improvements, including the location of any existing or proposed subdivision and land development.
 - e. the location of all existing streets, drives, and other accessways; and
 - f. the location of any existing bodies of water or watercourses, identified floodplain areas, 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 suitable scale showing the following:
- a. the proposed lowest floor elevation of any proposed building based upon North American Vertical Datum of 1988.
 - b. the elevation of the one-hundred (100) year flood;
 - c. if available, information concerning flood depths, pressures, velocities, impact and uplift forces and other factors associated with a one-hundred (100) year flood; and
 - d. detailed information concerning any proposed flood-proofing measures.
4. The following data and documentation:
- a. a document, certified by a registered professional engineer or architect, which states that the proposed construction or development has been adequately designed to withstand the one-hundred (100) year flood elevations, pressures, velocities, impact and uplift forces associated with the one-hundred (100) year flood.

Such statement shall include a description of the type and extent of floodproofing measures that have been incorporated into the design of the structure and/or the development.

- b. detailed information needed to determine compliance with Section 4.03 F, Storage, and Section 4.04, Development Which May Endanger Human Life, including:

- i. the amount, location and purpose of any materials or substances referred to in Sections 4.03 F and 4.04 which are intended to be used, produced, stored or otherwise maintained on site.
- ii. 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 Section 4.04 during a one-hundred (100) year flood.
- c. the appropriate component of the Department of Environmental Resources' "Planning Module for Land Development."
- d. where any excavation or grading is proposed, a plan meeting the requirements of the Department of Environmental Resources to implement and maintain erosion and sedimentation control.

D. Applicants for Special Permits Shall provide five copies of the following items:

1. A written request including a completed Building Permit Application form.
2. A small-scale map showing the vicinity in which the proposed site is located.
3. 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. topography based upon the North American Vertical Datum of 1988, showing existing and proposed contours at intervals of two (2) feet;
 - c. all property and lot lines including dimensions, and the size of the site expressed in acres or square feet;
 - d. the location of all existing streets, drives, other accessways, and parking areas, with information concerning widths, pavement types and construction, and elevations;
 - e. 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;

- f. the location of the flood plain boundary line, information and spot elevations concerning the one-hundred (100) year flood elevations, and information concerning the flow of water including direction and velocities;
- g. the location of all proposed buildings, structures, utilities, and any other improvements; and
- h. any other information which the municipality considers necessary for adequate review of the application.

4. Plans of all proposed buildings, structures and other improvements, clearly and legibly drawn at suitable scale showing the following:

- a. sufficiently detailed architectural or engineering drawings including floor plan sections, and exterior building elevations, as appropriate;
- b. for any proposed building, the elevation of the lowest floor (including basement) and, as required, the elevation of any other floor;
- c. complete information concerning flood depths, pressures, velocities, impact and uplift forces, and other factors associated with the one-hundred (100) year flood;
- d. detailed information concerning any proposed floodproofing measures;
- e. cross-section drawings for all proposed streets, drives, other accessways, and parking areas, showing all rights-of-way and pavement widths;
- f. profile drawings for all proposed streets, drives, and vehicular accessways including existing and proposed grades; and
- g. plans and profiles of all proposed sanitary and storm sewer systems, water supply systems, and any other utilities and facilities.

5. The following data and documentation:

- a. 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 or the client he represents;
- b. certification from a registered professional engineer, architect, or landscape architect that the proposed construction has been adequately designed to protect against damage from the one hundred (100) year flood;
- c. a statement certified by a registered 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 hundred (100) year flood, including a statement concerning the effects such pollution may have on human life;
- d. a statement, certified by a registered 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 one-hundred (100) year flood elevation and the effects such materials and debris may have on one-hundred (100) year flood elevations and flows;
- e. the appropriate component of the Department of Environmental Protections' "Planning Module for Land Development";
- f. where any excavation or grading is proposed, a plan meeting the requirements of the Department of Environmental Protection to implement and maintain erosion and sedimentation control;
- g. any other applicable permits such as, but not limited to, a permit for any activity regulated by the Department of Environmental Protection under Section 302 of Act 1978-166; and
- h. an evacuation plan which fully explains the manner in which the site will be safely evacuated before or during the course of a one-hundred (100) year flood.

Section 2.04 Review by County Conservation District

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

Section 2.05 Review of Application by Others

A copy of all plans and applications for any proposed construction or development in any identified flood plain area to be considered for approval may be submitted by the Floodplain Administrator to any other appropriate agencies and/or individuals (e.g., planning commission, municipal engineer, etc.) for review and comment.

Section 2.06 Changes

After the issuance of a building 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 the Floodplain Administrator for consideration.

Section 2.07 Placards

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

Section 2.08 Start of Construction

Work on the proposed construction and/or development shall begin within six (6) months and shall be completed within twelve (12) months after the date of issuance of the building permit or the permit shall expire unless a time extension is granted, in writing, by the Floodplain Administrator. Construction and/or development shall be considered to have started with the preparation of land, land clearing, grading, filling, excavation for basement, footings, piers, or foundations, erection of temporary forms, the installation of piling under proposed subsurface footings, or the installation of sewer, gas and water pipes, or electrical or other service lines from the street.

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.

Section 2.09 Inspection and Revocation

- A. 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 permit application and with all applicable Hickory Township laws and ordinances. He shall make as many inspections during and upon completion of the work as are necessary.
- B. In the discharge of his duties, the Floodplain Administrator shall have the authority to enter any building, structure, premises or development in the identified floodplain area, upon presentation of proper credentials, at any reasonable hour to enforce the provisions of this ordinance.
- C. In the event the Floodplain Administrator discovers that the work does not comply with the permit application or any applicable laws and ordinances, or that there has been a false statement or misrepresentation by any application, the Floodplain Administrator shall revoke the building permit and report such fact to the Board for whatever action it considers necessary.
- D. A record of all such inspections and violations of this ordinance shall be maintained.
- E. The Floodplain Administrator shall consider the requirements of the 34 PA Code and the 2009 IBC and the 2009 IRC or latest revisions thereof.

Section 2.10 Fees

Applications for a building permit shall be accompanied by a fee, payable to the Township based upon the estimated cost of the proposed construction as determined by the Floodplain Administrator at the following rates:

Estimated Cost	Fee
\$0.00 to \$200.00	\$0.00
\$201.00 to \$1,000.00	\$5.00
Each additional \$1,000.00 or part thereof beyond the first \$1,000.00	\$1.00

Section 2.11 Enforcement

A. Notices

Whenever the Floodplain Administrator or other authorized municipal representative determines that there are reasonable grounds to believe that there has been a violation of any provisions of this Ordinance, or of any regulation adopted pursuant thereto, the Floodplain Administrator shall give notice of such alleged violation as hereinafter provided. Such notice shall (a) be in writing; (b) include a statement of the reasons for its issuance; (c) allow a reasonable time not to exceed a period of thirty (30) days for the performance of any act it requires; (d) be served upon the property owner or his agent as the case may require; provided, however, that such notice or order shall be deemed to have been properly served upon such owner or agent when a copy thereof has been served with such notice by any other method authorized or required by the laws of this State; (e) contain an outline of remedial action which, if taken, will effect compliance with the provisions of this Ordinance.

B. Penalties

Any person who fails to comply with any or all of the requirements or provisions of this Ordinance or who fails or refuses to comply with any notice, order or direction of the Floodplain Administrator or any other authorized employee of the municipality shall be guilty of an offense and, upon conviction, shall pay a fine to the Township of not less than Twenty-five (\$25) dollars or more than three hundred (\$300) dollars plus costs of prosecution. In default of such payment, such person shall be imprisoned in county prison for a period not to exceed ten (10) days. Each day during which any violation of this Ordinance continues shall constitute a separate offense. In addition to the above penalties, all other actions are hereby reserved including an action in equity for the proper enforcement of this Ordinance. The imposition of a fine or penalty for any violation of, or non-compliance with, this Ordinance shall not excuse the violation or non-compliance or permit it to continue; and all such persons shall be required to correct or remedy such violations and non-compliance within a reasonable time. Any development initiated or any structure or building constructed, reconstructed, enlarged, altered, or relocated, in non-compliance with this Ordinance may be declared by the Board to be a public nuisance and abatable as such.

Section 2.12 Appeals

Any person aggrieved by any action or decision of the Floodplain Administrator involving the administration of the provisions of this Ordinance may appeal to the Board. Such appeal must be filed, in writing, within thirty (30) days after the decision or action of the Floodplain Administrator.

Upon receipt of such appeal, the Board shall set a time and place, within not less than ten (10) nor more than thirty (30) days, for the purpose of considering the appeal. Notice of the time and place at which the appeal will be considered shall be given to all parties.

Any person aggrieved by any decision of the Board may seek relief there from by appeal to court, as provided by the laws of this Commonwealth including the Pennsylvania Flood Plain Management Act.

ARTICLE III – IDENTIFICATION OF FLOODPLAIN AREAS

Section 3.00 Designation of Floodplain Areas

The identified floodplain area shall be any areas of the Township of Hickory, classified as special flood hazard areas (SFHAs) in the Flood Insurance Study (FIS) and the accompanying Flood Insurance Rate Maps (FIRMs) dated January, 18, 2012 and issued by the Federal Emergency Management Agency (FEMA) or the most recent revision thereof, including all digital data developed as part of the Flood Insurance Study.

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

For the purpose of this Ordinance, the following nomenclature is used in referring to the various kinds of floodplain areas:

FW (Floodway Area)- the areas identified as "Floodway" in the AE Zone in the Flood Insurance Study prepared by FEMA.

FF (Flood-Fringe Area)- the areas identified as Zones AE and A1-30 in the FIS prepared by FEMA.

FA (General Floodplain Area)- the areas identified as Zone A in the FIS prepared by FEMA.

The FW (Floodway Area)- the areas which represent 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. 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.

The FF (Flood-Fringe Area) – the areas Zones AE and A1-30 in the FIS that are subject to inundation by the 1-percent-annual chance flood event determined by detailed methods and have base flood elevations (BFE's) shown. The basis for the outermost boundary of this area shall be the one hundred (100) year flood elevations as shown in the flood profiles contained in the Flood Insurance Study. In Flood-Fringe Areas without a designated floodway, no new development shall be permitted unless it can be demonstrated that the cumulative effect of all past and projected development will not increase the BFE by more than one (1) foot.

The FA (General Floodplain Area) – the areas identified as Zone A in the FIS for which no one hundred (100) year flood elevations have been provided. When available, information from other Federal, State, and other acceptable sources shall be used to determine the one hundred (100) year elevation, as well as a floodway area, if possible. When no other information is available, the one hundred (100) year elevation shall be determined by using a point on the boundary of the identified floodplain area, which is nearest the construction site in question.

In lieu of the above, the municipality 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, who shall certify that the technical methods used correctly reflect currently accepted technical concepts. The Township of Hickory shall submit studies, analyses, computations, etc., in sufficient detail to allow a thorough technical review.

Section 3.01 Changes in Floodplain Area Delineations

The identified floodplain area may be revised or modified by the Board 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 the FEMA. Additionally, as soon as practicable, but not later than six (6) months after the date such information becomes available, a community shall notify the FEMA of the changes by submitting technical or scientific data.

Section 3.02 Disputes

Should a dispute arise concerning the identification of any floodplain area, an initial determination shall be made by the Planning Commission and any party aggrieved by such decision may appeal to the Board. The burden of proof shall be on the appellant.

ARTICLE IV-TECHNICAL PROVISIONS

Section 4.00 General

- A. 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 municipality, and until all required permits or approvals have been first obtained from the Department of Environmental Protection Regional Office.

In addition, the Federal Emergency Management Agency (FEMA) and Pennsylvania Department of Community and Economic Development, shall be notified prior to any alteration or relocation of any watercourse.

- B. Any new construction, development, uses or activities allowed within any identified floodplain area, shall be undertaken in strict compliance with the provisions contained in this Ordinance and any other applicable codes, ordinances and regulations.

Section 4.01 Special Floodway and Stream Setback Requirements

- A. Within any FW (Floodway 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.

- B. Within any FF (Flood-Fringe) or FA (General Floodplain Area), the following provisions apply:

1. No new construction or development shall be located within the area measured fifty (50) feet landward from the top-of-bank of any watercourse, unless a permit is obtained from the Department of Environmental Protection.

Section 4.02 Elevation and Floodproofing Requirements

- A. Residential Structures

Within any FW, FF, or FA, the lowest floor (including basement) of any new or substantially improved residential structure shall be at least one and one-half (1-1/2) feet above the one-hundred (100) year flood elevation.

B. Non-residential Structures

1. Within any FW, FF, or FA, the lowest floor (including basement) of any new or substantially improved non-residential structure shall be at least one and one-half (1-1/2) feet above the one-hundred (100) year flood elevation, or be designed and constructed so that the space enclosed by such structures shall remain either completely or essentially dry during any flood up to that height.
2. Any non-residential structure, or part thereof, made watertight below the regulatory flood elevation shall be floodproofed in accordance with the W1 or W2 space classification standards contained in the publication entitled "Flood-Proofing Regulations" published by the U.S. Army Corps of Engineers (June 1972, as amended March 1992) or with some other equivalent standard. All plans and specifications for such floodproofing shall be accompanied by a statement certified by a registered professional engineer or architect which states that the proposed design and methods of construction are in conformance with the above referenced standards.
3. The design and construction standards and specifications contained in the 2009 International Building Code (IBC) and in the 2009 International Residential Code (IRC) or the most recent revisions thereof and ASCE 24 and 34 PA Code (Chapters 401-405 as amended) shall be utilized.

C. Space below the lowest floor

1. 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 flood waters 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 must either be certified by a registered professional engineer or architect, or meet or exceed the following minimum criteria:
 - 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.

Section 4.03 Design and Construction Standards

The following standards shall apply for all construction and development proposed within any identified floodplain area:

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, unless substantiated data, justifying steeper slopes are submitted to, and approved by the Floodplain Administrator.
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 storm water runoff in a safe and efficient manner. The system shall insure proper drainage along streets, and provide positive drainage away from buildings. The system 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 flood waters.
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 any identified floodplain area 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.

D. 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.

E. Streets

The finished elevation of all new streets shall be no more than one (1) foot below the Regulatory Flood Elevation.

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 Section 4.04, Development Which May Endanger Human Life, shall be stored at or above the Regulatory Flood Elevation 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 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.

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 Regulatory Flood

Elevation shall be securely anchored or affixed to prevent flotation.

I. Floors, Walls and Ceilings

1. 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.
2. Plywood used at or below the Regulatory Flood Elevation shall be of a "marine" or "water-resistant" variety.
3. 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.
4. Windows, doors, and other components at or below the Regulatory Flood Elevation shall be made of metal or other water-resistant material.

J. Paints and Adhesives

1. Paints or other finishes used at or below the Regulatory Flood Elevation shall be of a "marine" or water-resistant quality.
2. Adhesives used at or below the Regulatory Flood Elevation shall be of a "marine" or water-resistant quality.
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 one hundred (100) year flood elevation.
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 Regulatory Flood Elevation.

M. Fuel Supply Systems

All gas and oil supply systems shall be designed to prevent the infiltration of flood waters into the system and discharges from the system into flood waters. Additional provisions shall be made for the drainage of these systems in the event that flood water infiltration occurs.

Section 4.04 Development Which May Endanger Human Life

A. In accordance with the Pennsylvania Flood Plain Management Act, and the regulations adopted by the Department of Community and Economic Development as required by the Act, 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 which will be used for any activity requiring the maintenance of a supply (more than 550 gallons or other comparable volume or any amount of radioactive substances) of any of the following dangerous materials or substances on the premises, shall be subject to the provisions of this section, in addition to all other applicable provisions:

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)
18. Radioactive substances, insofar as such substances are not otherwise regulated.

B. Within any FW (Floodway Area), any structure of the kind described in Subsection A, above, shall be prohibited.

- C. Within any FF (Flood-Fringe Area) or FA (General Floodplain Area), any structure of the kind described in Subsection A., above, shall be prohibited within the area measured fifty (50) feet landward from the top-of-bank of any watercourse.
- D. Where permitted within any FF (Flood-Fringe Area) or FA (General Floodplain Area), any 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 (1-1/2) feet above the one-hundred (100) year flood, and
 - 2. designed to prevent pollution from the structure or activity during the course of a one-hundred (100) year flood.
- E. Any such structure, or part thereof, that will be built below the Regulatory Flood Elevation shall be designed and constructed in accordance with the standards for completely dry flood-proofing contained in the publication "Flood-Proofing Regulations" (U.S. Army Corps of Engineers, June 1972), or with some other equivalent watertight standard.

Section 4.05 Special Requirements for Manufactured Homes

- A. Within any FW (Floodway Area), Manufactured Homes shall be prohibited.
- B. Where permitted within any FF (Flood-Fringe Area) or FA (General Floodplain Area), all Manufactured Homes and any additions 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 (1 1/2) feet above base flood elevation.
 - 3. anchored to resist flotation, collapse, or lateral movement.

Section 4.06 Special Requirements for Subdivisions

All subdivision proposals and development proposals containing at least 50 lots or at least 5 acres, whichever is the lesser, in flood hazard areas where base flood elevation data are not available, shall be supported by hydrologic and hydraulic engineering analyses that determine base flood elevations and

floodway information. The analyses shall be prepared by a licensed professional engineer in a format required by FEMA for a Conditional Letter of Map Revision or Letter of Map Revision. Submittal requirements and processing fees shall be the responsibility of the applicant.

Section 4.07 Special Requirements for Recreational Vehicles

Recreational vehicles in Zones A, A1-30, AH and AE must either

1. be on the site for fewer than 180 consecutive days,
2. be fully licensed and ready for highway use, or
3. meet the permit requirements for manufactured homes in Section 4.05.

ARTICLE V-ACTIVITIES REQUIRING SPECIAL PERMITS

Section 5.00 General

In accordance with the administrative regulations promulgated by the by the Department of Community and Economic Development to implement the Pennsylvania Flood Plain Management Act, (Act 1978-166), the following obstructions and activities are prohibited if located entirely or partially within an identified floodplain area unless a Special Permit is issued:

1. hospitals (public or private)
2. nursing homes (public or private)
3. jails or prisons
4. new manufactured homes and manufactured home subdivisions, and substantial improvements to existing manufactured homes.

Section 5.01 Application Review Procedures

Upon receipt of an application for a Special Permit by the Township, the following procedures shall apply in addition to those in Article II:

- 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 County Planning Commission by registered or certified mail for its review and recommendations. Copies of the application shall also be forwarded to the Township Planning Commission and Township Engineer for review and comment.

- B. If an application is received that is incomplete, the Township shall notify the applicant in writing, stating in what respects 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 the Department of Community and Economic Development, by registered or certified mail, within five (5) working days after the date of approval.
- E. Before issuing the Special Permit, the Township of Hickory shall allow the Department of Community and Economic Development thirty (30) days, after receipt of the notification by the Department, to review the application and decision made by the Township of Hickory .
- F. If the Township does not receive any communication from the Department of Community and Economic Development during the thirty (30) day review period, it may issue a Special Permit to the applicant.
- G. If the Department of Community and Economic Development 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 Permit.

Section 5.02 Special Technical Requirements

- A. In addition to the requirements of Article IV of this Ordinance, the following minimum requirements shall also apply to any proposed development requiring a Special Permit. If there is any conflict between any of the following requirements and those in Article IV, of this Ordinance or in any other code, ordinance, or regulation, the more restrictive provision shall apply.
- B. No application for a Special 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. At a minimum, all new structures shall be designed, located, and constructed so that:

- a. the structure will survive inundation by waters of the one-hundred (100) year flood without any lateral movement or damage to either the structure itself, or to any of its equipment or contents below the one-hundred (100) year flood elevation.
 - b. the lowest floor elevation will be at least one and one-half (1-1/2) feet above the one-hundred (100) year flood.
 - c. the occupants of the structure can remain inside for an indefinite period of time and be safely evacuated at any time during the one-hundred (100) year flood.
2. Prevent any significant possibility of pollution, increased flood levels or flows, or debris endangering life and property.

All hydrologic and hydraulic analyses shall be undertaken only by professional engineers or others of demonstrated qualification, 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 of Hickory and the Department of Community and Economic Development.

ARTICLE VI-EXISTING STRUCTURES IN IDENTIFIED FLOODPLAIN AREAS

Section 6.00 General

Structures existing in any identified floodplain area prior to the enactment of this Ordinance may continue subject to the following provisions:

- A. No expansion or enlargement of an existing structure shall be allowed within any identified floodway that would cause any increase in flood heights.
- B. Any modification, alteration, reconstruction, or improvement of any kind to an existing structure, to an extent or amount of fifty (50) percent or more of its market value shall constitute a substantial improvement and shall be undertaken in full compliance with the provisions of this Ordinance.
- C. No expansion or enlargement of an existing structure shall be allowed within any Flood-Fringe (FF) Area that would, together with all other existing and anticipated development, increase the BFE more than one (1) foot at any point.

ARTICLE VII-VARIANCES

Section 7.00 General

If compliance with any of the requirements of this Ordinance would result in an exceptional hardship for a prospective builder, developer, or landowner, the Township may, upon request, grant relief from the strict application of the requirements.

Section 7.01 Variance Procedures and Requirements

Requests for variances shall be considered by the Township in accordance with the following:

- A. No variance shall be granted for any construction, development, use or activity within any floodway area that would cause any increase in the one-hundred (100) year flood elevation.
- B. Except for a possible modification of the freeboard requirements involved, no variance shall be granted for any of the other requirements pertaining specifically to development regulated by Special Permit (Art. V) or to Development which May Endanger Human Life (Sec. 4.04).
- C. If granted, a variance shall involve only the least modification necessary to provide relief.
- D. In granting any variance, the Township shall attach whatever reasonable conditions and safeguards it considers necessary in order to protect the public health, safety, and welfare, and to achieve the objectives of this Ordinance.
- E. Whenever a variance is granted, the Township of Hickory shall notify the applicant in writing that:
 1. the granting of the variance may result in increased premium rates for flood insurance.
 2. such variances may increase the risks to life and property.
- F. In reviewing any request for a variance, the Township shall consider, but not be limited to, the following:
 1. that there is good and sufficient cause.
 2. that failure to grant the variance would result in exceptional hardship to the applicant.
 3. that the granting of the variance will:

- i. neither result in an unacceptable or prohibited increase in flood heights, additional threats to public safety, or extraordinary public expense;
- ii. nor create nuisances, cause fraud on, or victimize the public, or conflict with any other applicable State statute or regulation, or local ordinance or regulation.

G. A complete record of all variance requests and related actions shall be maintained by the Township of Hickory. In addition, a report of all variances granted during the year shall be included in the annual report to the Federal Emergency Management Agency (FEMA).

H. No variance shall be granted for any construction, development, use, or activity within any Flood-Fringe (FF) Area that would, together with all other existing and anticipated development, increase the BFE than one (1) foot at any point.

Notwithstanding any of the above, however, all structures shall be designed and constructed so as to have the capability of resisting the one-hundred (100) year flood.

ARTICLE VIII DEFINITIONS

Section 8.00 General

Unless specifically defined below, words and phrases used in this Ordinance shall be interpreted so as to give this Ordinance its most reasonable application.

Section 8.01 Specific Definitions

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 that has a one percent chance of being equaled or exceeded in any given year (also called the "100-year flood").

Base Flood Elevation (BFE)- the elevation shown on the Flood Insurance Rate Map (FIRM) for Zones AE, AH, A1-30 that indicates the water surface elevation resulting from a flood that has a 1-percent or greater chance of being equaled or exceeded in any given year.

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

Building- a combination of materials to form a permanent structure having walls and a roof. Included shall be all Manufactured Homes and trailers to be used for human habitation.

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.

Construction- the construction, reconstruction, renovation, repair, extension, expansion, alteration, or relocation of a building or structure, including the placement of Manufactured Homes.

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.

Essentially dry space- a space that 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.

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.

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 (FIRM)- the official map on which the Federal Emergency Management Agency has delineated both the areas of special flood hazards and the risk premium zones applicable to the community.

Flood Insurance Study (FIS)- the official report provided by the Federal Emergency Management Agency that includes flood profiles, the Flood Insurance Rate Map, the Flood Boundary and Floodway Map, and the water surface elevation of the base flood.

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

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

Historic Structures- any structure that is:

- A. Listed individually in the National Register of Historic Places (a listing maintained by the Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;
- B. Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;
- C. Individually listed on a state inventory of historic places in states that have been approved by the Secretary of the Interior;

or

- D. Individually listed on a local inventory of historic places in communities with historic preservation 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.

Land development- (i) the improvement of one lot, or two or more contiguous lots, tracts or parcels of land for any purpose involving (a), a group of two or more residential or nonresidential buildings, whether proposed initially or cumulatively, or a single nonresidential building on a lot or lots regardless of the number of occupants or tenure; or (b) the division or allocation of land or space, whether initially or cumulatively, between or among two or more existing or prospective occupants by means of, or for the purpose of streets, common areas, leaseholds, condominiums, building groups or other features; (c) a subdivision of land.

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 that are placed on a site for more than 180 consecutive days.

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

Minor repair- the replacement of existing work with equivalent materials for the purpose of routine maintenance and upkeep, but not including the cutting away of any wall, partition or portion thereof, the removal or cutting of any structural beam or bearing means of egress, or rearrangement of parts of a structure affecting the exitway requirements; nor shall minor repairs include addition to, alteration of, replacement or relocation of any standpipe, water supply, sewer, drainage, drain leader, gas, soil, waste vent or similar piping, electric wiring or mechanical or other work affecting health or general safety.

New Construction- structures for which the start of construction commenced on or after August 2nd 1982, and includes any subsequent improvements thereto.

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

Obstruction- any wall, dam, wharf, embankment, levee, dike, pile abutment, projection, excavation, channel, rectification, culvert, building, fence, stockpile, refuse, fill, structure, or matter in, along, across, or projecting into any channel, watercourse, or floodprone area, (i) which may impede, retard, or change the direction of the flow of water either in itself or by catching or collecting debris carried by such water, or (ii) which is placed where the flow of the water might carry the same downstream to the damage of life and property.

One hundred year flood-a flood that, on the average, is likely to occur once every one-hundred (100) years (i.e. that has one (1) percent chance of occurring each year, although the flood may occur in any year).

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.

Recreational Vehicle- a vehicle that is

- A. built on a single chassis;
- B. not more than 400 square feet, measured at the largest horizontal projections;
- C. designed to be self-propelled or permanently towable by a light-duty truck,
- D. 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 (1-1/2) feet.

Special Flood Hazard Area (SFHA)- means an area in the floodplain subject to a 1 percent or greater chance of flooding in any given year. It is shown on the FIRM as Zone A, AO, A1-A30, AE, A99, or AH.

Special Permit- a special approval which is required for hospitals, nursing homes, jails, and new mobile 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.

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

Structure- a walled and roofed building, including a gas or liquid storage tank that is principally above ground, as well as manufactured home.

Subdivision- the division or redivision of a lot, tract, or parcel of land by any means into two or more lots, tracts, parcels, or other division of land including changes in existing lot lines for the purpose, whether immediate or future, of lease, transfer of ownership, or building, or lot development. The division of land for agricultural purposes into parcels of more than ten (10) acres, not involving any new street or easement of access, 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 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 that have incurred "substantial damage" regardless of the actual repair work performed. The term does not, however, include either:

- A. Any project for improvement of a structure to correct existing violations of state or local health, sanitary or safety code specifications which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions, or;
- B. Any alteration of a "historic structure," provided that the alteration will not preclude the structure's continued designation as a "historic structure."

Violation- means 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.

This Ordinance amends Ordinance No. 2 of 1982 in order to comply with the requirements of the Federal Emergency Management Agency concerning requirements for the National Flood Insurance Program.

ARTICLE IX. ENACTMENT

Section 9.00 Adoption

This Ordinance shall be effective on January 1, 2012 and shall remain in force until modified, amended or rescinded by the Township of Hickory, Lawrence County, Pennsylvania.

ENACTED and ADOPTED by the Board of Supervisors this 28th day of December, 2011.

BOARD OF SUPERVISORS OF
HICKORY TOWNSHIP,
LAWRENCE COUNTY, PENNSYLVANIA

ATTEST:

Carol Kordish
Hickory Township Secretary
Carol Kordish

BY: William W. Dean
Board President, William W. Dean

Kathleen Abranovich
Supervisor, Kathleen Abranovich

Jon Sweet
Supervisor, Jon Sweet