

**BOROUGH OF ST. CLAIR
SCHUYLKILL COUNTY, PENNSYLVANIA**

ORDINANCE NO. 434

**AN ORDINANCE OF THE BOROUGH OF ST. CLAIR,
SCHUYLKILL COUNTY, PENNSYLVANIA, AMENDING
THE EXISTING FLOOD PLAIN ORDINANCE NO. 342,
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 BOROUGH OF
ST. CLAIR WHICH ARE SUBJECT TO FLOODING; AND
ESTABLISHING PENALTIES FOR ANY PERSONS WHO
FAIL, OR REFUSE TO COMPLY WITH, THE
REQUIREMENTS OR PROVISIONS OF THIS
ORDINANCE.**

The Borough Council of the Borough of St. Clair, Schuylkill County, Pennsylvania (the "Borough"), hereby enacts and ordains as follows:

WHEREAS, Section 1201 of the Borough Code, 53 P.S. §46201, entitled "General Powers", authorizes the Borough to make and adopt ordinances necessary for the proper management, care and control of the Borough, and the maintenance of the health and welfare of the Borough and its citizens.

WHEREAS, Section 1202 of the Borough Code, found at 53 P.S. §46202, entitled "Specific Powers", authorizes the Borough to adopt ordinances to secure the safety of persons or property within the Borough.

NOW THEREFORE, BE IT ENACTED AND ORDAINED BY THE Borough Council of the Borough of St. Clair, Schuylkill County, Pennsylvania, in accordance with the general powers permitted by the Borough Code (53 P.S. §46201, et seq.), as follows:

CHAPTER 1. ENABLING STATUTE

Section 1.01. Title

This Ordinance shall be known as the "St. Clair Borough Flood Plain Ordinance".

Section 1.02. Citation

This Ordinance shall be cited as the “St. Clair Borough Flood Plain Ordinance”.

Section 1.03. 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 Council of the Borough of St. Clair does hereby order as follows.

CHAPTER 2. GENERAL PROVISIONS

Section 2.01. 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.
- E. Comply with federal and state floodplain management requirements.

Section 2.02. Applicability

A. 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 Borough of St. Clair unless a Permit has been obtained from the Floodplain Administrator.

Section 2.03. Abrogation and Greater Restrictions

This ordinance supersedes any other conflicting provisions which 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. If there is any conflict between any of the provisions of this Ordinance, the more restrictive shall apply.

Section 2.04. Severability

If any section, subsection, paragraph, sentence, clause, or phrase of this Ordinance shall be declared invalid for any reason whatsoever, such a decision shall not affect the remaining portions of the 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 2.05. Warning and Disclaimer of Liability

The degree of flood protection sought by the provisions of this Ordinance is considered reasonable for regulatory purposes and is based on accepted 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 Ordinance does not imply that areas outside any identified floodplain areas, 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 Borough of St. Clair or any officer or employee thereof for any flood damages that result from reliance on this Ordinance or any administrative decision lawfully made thereunder.

CHAPTER 3. ADMINISTRATION

Section 3.01. Designation of the Floodplain Administrator

The Borough Secretary is hereby appointed to administer and enforce this ordinance and is referred to herein as the Floodplain Administrator. The Floodplain Administrator may: (A) Fulfill the duties and responsibilities set forth in these regulations, (B) Delegate duties and responsibilities set forth in these regulations to qualified technical personnel, plan examiners, inspectors, and other employees, or (C) Enter into a written agreement or written contract with another agency or private sector entity to administer specific provisions of these regulations. Administration of any part of these regulations by another entity shall not relieve the community of its responsibilities pursuant to the participation requirements of the National Flood Insurance Program as set forth in the Code of Federal Regulations at 44 C.F.R. Section 59.22.

In the absence of a designated Floodplain Administrator, the Floodplain Administrator duties are to be fulfilled by the President of Council.

Section 3.02. Permits Required

A Permit shall be required before any construction or development is undertaken within any area of the Borough of St. Clair.

Section 3.03. Duties and Responsibilities of the Floodplain Administrator

A. The Floodplain Administrator shall issue a 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 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 1966-537, as amended); the Pennsylvania Dam Safety and Encroachments Act (Act 1978-325, as amended); the Pennsylvania Clean Streams Act (Act 1937-394, as amended); and the U.S. Clean Water Act, Section 404, 33, U.S.C. 1344. No permit shall be issued until this determination has been made.

C. In the case of existing structures, prior to the issuance of any Development/Permit, the Floodplain Administrator shall review the proposed cost of improvements or repairs and the pre-improvement market value of the structure, so that a substantial improvement/substantial damage determination can be made, in accordance with FEMA's Substantial Improvement /Substantial Damage Desk Reference.

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 permit application and with all applicable municipal laws and ordinances. He/she shall make as many inspections during and upon completion of the work as are necessary.

E. In the discharge of his/her 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.

F. 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 applicant, the Floodplain Administrator shall revoke the Permit and report such fact to the Council for whatever action it considers necessary.

G. The Floodplain Administrator shall maintain in perpetuity, or for the lifetime of the structure, all records associated with the requirements of this ordinance including, but not limited to, finished construction elevation data, permitting, inspection and enforcement.

H. The Floodplain Administrator is the official responsible for submitting a biennial report to FEMA concerning community participation in the National Flood Insurance Program as requested.

I. The responsibility, authority and means to implement the commitments of the Floodplain Administrator can be delegated from the person identified. However, the ultimate responsibility lies with the person identified in the floodplain ordinance as the floodplain administrator/manager.

J. The Floodplain Administrator shall consider the requirements of the 34 PA Code and the 2015 IBC and the 2015 IRC, or the latest revision thereof as adopted by the Commonwealth of Pennsylvania.

Section 3.04. Application Procedures and Requirements

A. Application for such a Permit shall be made, in writing, to the Floodplain Administrator on forms supplied by the Borough of St. Clair. 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 including address.
5. Listing of other permits required.
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.
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 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;
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 have been used; and
7. electrical, heating, ventilation, plumbing, air conditioning equipment, and other service facilities have been designed and 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 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, driveways, and other access ways; and
 - e. 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 base flood;

- c. supplemental information as may be necessary under 34 PA Code, the 2015 IBC or the 2015 IRC, or the latest revision thereof as adopted by the Commonwealth of Pennsylvania.

4. The following data and documentation:

- a. detailed information concerning any proposed floodproofing measures and corresponding elevations.
- b. if available, information concerning flood depths, pressures, velocities, impact and uplift forces and other factors associated with a base flood.
- c. documentation, certified by a registered professional engineer or architect, to show that the effect of any proposed development within a Floodway Area (See section 4.02 A) will not increase the base flood elevation at any point.
- d. documentation, certified by a registered professional engineer or architect, to show that the cumulative effect of any proposed development within an AE Area/District without floodway (See Section 4.02 B) when combined with all other existing and anticipated development, will not increase the base flood elevation more than one (1) foot at any point within the community.
- e. 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 pressures, velocities, impact and uplift forces associated with the base flood.

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

- f. detailed information needed to determine compliance with Section 5.03 F., Storage, and Section 5.04, Development Which May Endanger Human Life, including:
 - i. the amount, location and purpose of any materials or substances referred to in Sections 5.03 F. and 5.04 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 5.04 during a base flood.
- g. the appropriate component of the Department of Environmental Protection's "Planning Module for Land Development."
- h. 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.

D. Applications for Permits shall be accompanied by a fee, payable to the municipality based upon the estimated cost of the proposed construction as determined by the Floodplain Administrator.

Section 3.05. Review of Application by Others

A copy of all plans and applications for any proposed construction or development in any identified floodplain 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 3.06. Changes

After the issuance of a 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.

Section 3.07. Placards

In addition to the Permit, the Floodplain Administrator shall issue a placard, or similar document, 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.

Section 3.08. Start of Construction

Work on the proposed construction or development shall begin within 180 days after the date of issuance of the development permit. Work shall also be completed within twelve (12) months after the date of issuance of the permit or the permit shall expire unless a time extension is granted, in writing, by the Floodplain Administrator. The issuance of development permit does not refer to the zoning approval.

The actual start of construction 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.

Time extensions shall be granted only if a written request is submitted by the applicant, who sets forth sufficient and reasonable cause for the Floodplain Administrator to approve such a request and the original permit is compliant with the ordinance & FIRM/FIS in effect at the time the extension is granted.

Section 3.09. 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 regulations adopted pursuant thereto, the Floodplain Administrator shall give notice of such alleged violation as hereinafter provided. Such notice shall:

1. be in writing;
2. include a statement of the reasons for its issuance;
3. allow a reasonable time not to exceed a period of thirty (30) days for the performance of any act it requires;
4. 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;
5. contain an outline of remedial actions which, if taken, will affect 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 of 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 Borough of St. Clair, of not less than Twenty-five Dollars (\$25.00) nor more than Six Hundred Dollars (\$600.00) plus costs of prosecution. 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 noncompliance with this Ordinance shall not excuse the violation or noncompliance or permit it to continue. All such persons shall be required to correct or remedy such violations and noncompliance within a reasonable time. Any development initiated or any structure or building constructed, reconstructed, enlarged, altered, or relocated, in noncompliance with this Ordinance may be declared by the Council to be a public nuisance and abatable as such.

Section 3.10. Appeals

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

B. Upon receipt of such appeal the Zoning Hearing Board shall consider the appeal in accordance with the Municipalities Planning Code and any other local ordinance.

C. Any person aggrieved by any decision of the Zoning Hearing Board may seek relief therefrom by appeal to court, as provided by the laws of this State including the Pennsylvania Flood Plain Management Act.

CHAPTER 4. IDENTIFICATION OF FLOODPLAIN AREAS

Section 4.01. Identification

The identified floodplain area shall be:

- A. any areas of Borough of St. Clair, classified as Special Flood Hazard Areas (SFHAs) in the Flood Insurance Study (FIS) and the accompanying Flood Insurance Rate Maps (FIRMs) dated May 18, 2021, 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 Borough of St. Clair and declared to be a part of this ordinance.

Section 4.02. Description and Special Requirements of Identified Floodplain Areas

The identified floodplain area shall consist of the following specific areas:

A. The Floodway Area shall be those areas identified in the FIS and the FIRM as floodway and which represent the channel of a watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without increasing the water surface elevation by more than one (1) foot at any point. This term shall also include floodway areas which have been identified in other available studies or sources of information for those Special Flood Hazard Areas where no floodway has been identified in the FIS and FIRM.

1. Within any floodway area, no encroachments, including fill, new construction, substantial improvements, or other development shall be permitted unless it has been demonstrated through hydrologic and hydraulic analysis performed in accordance with standard engineering practice that the proposed encroachment would not result in any increase in flood levels within the community during the occurrence of the base flood discharge.
2. Within any floodway area, no new construction or development shall be allowed, unless the appropriate permit is obtained from the Department of Environmental Protection Regional Office.

B. The AE Area/District shall be those areas identified as an AE Zone on the FIRM included in the FIS prepared by FEMA for which base flood elevations have been provided.

1. The AE Area adjacent to the floodway shall be those areas identified as an AE Zone on the FIRM included in the FIS prepared by FEMA for which base flood elevations have been provided and a floodway has been delineated.
2. AE Area without floodway shall be those areas identified as an AE zone on the FIRM included in the FIS prepared by FEMA for which base flood elevations have been provided but no floodway has been determined.
 - i. No encroachments, including fill, new construction, substantial improvements, or other development shall be permitted in an AE Zone without floodway, unless it has been demonstrated through hydrologic and hydraulic analysis performed in accordance with standard engineering practice that the proposed development together with all other existing and anticipated development, would not result in an increase in flood levels of more than one foot within the entire community during the occurrence of the base flood discharge.

- ii. 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 the appropriate permit is obtained from the Department of Environmental Protection Regional Office.

C. The A Area/District shall be those areas identified as an A Zone on the FIRM included in the FIS prepared by FEMA and for which no base flood elevations have been provided. For these areas, elevation and floodway information from other Federal, State, or other acceptable sources shall be used when available. Where other acceptable information is not available, the base flood elevation shall be determined by using the elevation of a point on the boundary of the identified floodplain area which is nearest the construction site.

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. Studies, analyses, computations, etc., shall be submitted in sufficient detail to allow a thorough technical review by the municipality. In the absence of any of the above data or documentation, the community may require elevation of the lowest floor to be at least three feet above the highest adjacent grade.

D. The AO and AH Area/District shall be those areas identified as Zones AO and AH on the FIRM and in the FIS. These areas are subject to inundation by 1-percent-annual-chance shallow flooding where average depths are between one and three feet. In Zones AO and AH, drainage paths shall be established to guide floodwaters around and away from structures on slopes.

Section 4.03. Changes in Identification of Area

The Identified Floodplain Area may be revised or modified by the Council where studies or information provided by a qualified agency or person documents the need for such revision. However, prior to any such change to the Special Flood Hazard Area, 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, a community shall notify FEMA of the changes to the Special Flood Hazard Area by submitting technical or scientific data. See 5.01 (B) for situations where FEMA notification is required.

Section 4.04. Boundary Disputes

Should a dispute concerning any identified floodplain boundary arise, an initial determination shall be made by the Borough of St. Clair and any party aggrieved by this decision or determination may appeal to the Council. The burden of proof shall be on the appellant.

Section 4.05. Jurisdictional Boundary Changes

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

CHAPTER 5. TECHNICAL PROVISIONS

Section 5.01. General

A. 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 municipality, and until all required permits or approvals have first been obtained from the Department of Environmental Protection 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 the Pennsylvania Department of Community and Economic Development, shall be notified prior to any alteration or relocation of any watercourse.

B. When the Borough of St. Clair proposes to permit the following encroachments:

- any development that causes a rise in the base flood elevations within the floodway; or
- any development occurring in Zones A1-30 and Zone AE without a designated floodway, which will cause a rise of more than one foot in the base flood elevation; or
- alteration or relocation of a stream (including but not limited to installing culverts and bridges)

the applicant shall (as per 44 CFR Part 65.12):

1. apply to FEMA for conditional approval of such action prior to permitting the encroachments to occur.

2. Upon receipt of the Administrator's conditional approval of map change and prior to approving the proposed encroachments, a community shall provide evidence to FEMA of the adoption of floodplain management ordinances incorporating the increased base flood elevations and / or revised floodway reflecting the post-project condition.
3. Upon completion of the proposed encroachments, a community shall provide as-built certifications. FEMA will initiate a final map revision upon receipt of such certifications in accordance with 44 CFR Part 67.

C. 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 5.02. Elevation and Floodproofing Requirements

A. Residential Structures

1. In AE, A1-30, and AH Zones, any new construction or substantial improvement shall have the lowest floor (including basement) elevated up to, or above, the Regulatory Flood Elevation.
2. In A Zones, where there are no Base Flood Elevations specified on the FIRM, any new construction or substantial improvement shall have the lowest floor (including basement) elevated up to, or above, the Regulatory Flood Elevation determined in accordance with Section 4.02.C of this ordinance.
3. In AO Zones, any new construction or substantial improvement shall have the lowest floor (including basement) at or above the highest adjacent grade at least as high as the depth number specified on the FIRM.
4. The design and construction standards and specifications contained in the 2015 International Building Code (IBC) and in the 2015 International Residential Code (IRC) or the latest edition thereof adopted by the Commonwealth of Pennsylvania, and ASCE 24 and 34 PA Code (Chapters 401-405 as amended) shall be utilized, where they are more restrictive.

B. Non-residential Structures

1. In AE, A1-30 and AH Zones, any new construction or substantial improvement of a non-residential structure shall have the lowest floor (including basement) elevated up to, or above, the Regulatory Flood Elevation, or be designed and constructed so that the space enclosed below the Regulatory Flood Elevation:
 - 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 A Zones, where no Base Flood Elevations are specified on the FIRM, any new construction or substantial improvement shall have the lowest floor (including basement) elevated or completely floodproofed up to, or above, the Regulatory Flood Elevation determined in accordance with Section 4.02.C of this ordinance.
3. In AO Zones, any new construction or substantial improvement shall have their lowest floor elevated or completely floodproofed above the highest adjacent grade to at least as high as the depth number specified on the FIRM.
4. 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. There should be a statement submitted with the permit application and a statement submitted with the as-built Flood proofing Certificate prior to the issuance of the Certificate of Occupancy.
5. Any non-residential structure that will be floodproofed must submit the following to the Floodplain Administrator along with the non-residential Floodproofing Certificate and prior to the issuance of the Certificate of Occupancy:

- a. An inspection and Maintenance Plan detailing the annual maintenance of floodproofed components ensuring that all components will operate properly under flood conditions. Components that must be inspected include at a minimum:
1. Mechanical equipment such as sump pumps and generators,
 2. Flood shields and closures,
 3. Walls and wall penetrations, and
 4. Levees and berms (as applicable)
- b. Flood Emergency Operation Plan detailing the procedures to be followed during a flooding event, and must include information pertaining to how all components will operate properly under all conditions, including power failures. The design professional must produce the plan. An adequate plan must include the following:
1. An established chain of command and responsibility with leadership responsibilities clearly defined for all aspects of the plan.
 2. A procedure for notification of necessary parties when flooding threatens and flood warnings are issued. Personnel required to be at the building should have a planned and safe means of ingress and should have no other emergency response duties during a flood event. Alternates should be assigned in the event that the primary persons responsible are unable to complete their assigned duties under the plan.
 3. A list of specific duties assigned to ensure that all responsibilities are addressed expeditiously. The locations of materials necessary to properly install all floodproofing components must be included in the list.
 4. An evacuation plan for all personnel or occupants; those without duties for the flood emergency as well as those with duties for implementing the plan. All possible ingress and egress routes must be identified.
 5. A periodic training and exercise program to keep personnel and occupants aware of their duties and responsibilities. Training drills should be held at least once a year and should be coordinated with community officials.

6. The design and construction standards and specifications contained in the 2015 International Building Code (IBC) and in the 2015 International Residential Code (IRC) or the latest revision thereof as adopted by the Commonwealth of Pennsylvania, and ASCE 24 and 34 PA Code (Chapters 401-405 as amended) shall be utilized, where they are more restrictive.

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. 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 installed on two (2) separate walls.
 - b. the bottom of all openings shall be no higher than one (1) foot above grade.
 - c. openings may be equipped with screens, louvers, or other coverings or devices provided that they permit the automatic entry and exit of floodwaters.

D. Historic Structures

Historic structures undergoing repair or rehabilitation that would constitute a substantial improvement as defined in this ordinance, must comply with all ordinance requirements that do not preclude the structure's continued designation as a historic structure. Documentation that a specific ordinance requirement 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 ordinance requirements will be the minimum necessary to preserve the historic character and design of the structure.

E. Accessory structures

Structures accessory to a principal building need not be elevated or floodproofed to remain dry, but shall comply, at a minimum, with the following requirements:

1. 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.
2. floor area shall not exceed 600 square feet.
3. The structure will have a low damage potential.
4. the structure will be located on the site so as to cause the least obstruction to the flow of flood waters.
5. power lines, wiring, and outlets will be elevated to the Regulatory Flood Elevation.
6. permanently affixed utility equipment and appliances such as furnaces, heaters, washers, dryers, etc. are prohibited.
7. sanitary facilities are prohibited.
8. the structure shall be adequately anchored to prevent flotation, collapse, and lateral 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 registered professional engineer or architect, or meet or exceed the following minimum criteria:
 - a. a minimum of two openings having a net total area of not less than one (1) square inch for every square foot of enclosed space.
 - b. the bottom of all openings shall be no higher than one (1) foot above grade.
 - c. openings may be equipped with screens, louvers, etc. or other coverings or devices provided that they permit the automatic entry and exit of flood waters.
9. For accessory structures that are 200 square feet or larger in area (footprint) and that are below the base flood elevation, a signed Declaration of Land Restriction (Nonconversion Agreement) shall be recorded on the property deed prior to issuance of the Certificate of Occupancy.

Section 5.03. Design and Construction Standards

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

A. Fill

1. If fill is used, it shall:
 - a. extend laterally at least fifteen (15) feet beyond the building line from all points;
 - b. consist of soil or small rock materials only - Sanitary Landfills shall not be permitted;
 - c. be compacted to provide the necessary permeability and resistance to erosion, scouring, or settling;
 - d. be no steeper than one (1) vertical to two (2) horizontal feet unless substantiated data justifying steeper slopes are submitted to, and approved by the Floodplain Administrator; and
 - e. 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 ensure 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 flood waters.
3. No part of any on-site waste disposal 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 5.04, Development Which May Endanger Human Life, shall be stored at or above the Regulatory Flood Elevation 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 and other finishes used at or below the Regulatory Flood Elevation shall be of "marine" or "water-resistant" quality.
2. Adhesives used at or below the Regulatory Flood Elevation shall be of a "marine" or "water-resistant" variety.
3. All wooden components (doors, trim, cabinets, etc.) used at or below the Regulatory Flood Elevation 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 base flood elevation.
2. Separate electrical circuits shall serve lower levels and shall be dropped from above.

L. Equipment

1. 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 and shall be anchored to resist floatation, collapse, and lateral movement.
2. Ductwork shall be elevated to or above the Regulatory Flood Elevation or floodproofed to remain water resistant.

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.

N. Uniform Construction Code Coordination

The Standards and Specifications contained 34 PA Code (Chapters 401-405), as amended and not limited to the following provisions shall apply to the above and other sections and subsections of this ordinance, to the extent that they are more restrictive and supplement the requirements of this ordinance.