

the designated Township official shall be presumed correct and the burden of proof shall be on the appellant.

ARTICLE IV
Technical Provisions

§ 48-20. General requirements.

- 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 and until all required permits or approvals have been first obtained from the commonwealth. In addition, the Federal Emergency Management Agency (FEMA) and Pennsylvania Department of Community and Economic Development, Bureau of Community Planning, shall be notified prior to any alteration or relocation of any watercourse. **[Amended 3-19-2009]**
- B. Where a flood-prone area has been identified which includes a floodway area, the following provisions apply:
- (1) Within any designated floodway (FW) area, no new construction, development, use, activity or encroachment of any kind shall be allowed, except where the effect of such proposed activity on flood heights is fully offset by accompanying improvements.
 - (2) Within any designated flood-fringe (FF) area, new construction and other development, uses and activities shall be allowed, provided that they are undertaken in strict compliance with the provisions contained in this chapter and any other applicable codes, ordinances and regulations.
- C. Where a flood-prone area has been identified, which does not include a floodway area, the following provisions apply:
- (1) Within any area designated FA, new construction and other development, uses and activities shall be allowed, provided that they are undertaken in strict compliance with the provisions contained in this chapter, as well as any other applicable codes, ordinances and regulations.

§ 48-21. Elevation and floodproofing requirements. [Amended 12-2-1991 by Ord. No. 10C]

- A. Residential structures. Within any identified floodplain area, the elevation of the lowest floor (including basement) of any new or substantially improved residential structure shall be 1 1/2 feet or more above the one-hundred-year flood elevation. Enclosed areas below the lowest floor (including basement) are prohibited.
- B. Nonresidential structures.
- (1) Within any identified floodplain area, the elevation of the lowest floor (including basement) of any new or substantially improved nonresidential structure shall be

1 1/2 feet or more above the one-hundred-year flood elevation or be floodproofed up to that height.

- (2) Any nonresidential structure, or part thereof, having a lowest floor (including basement) which is not elevated to at least 1 1/2 feet above the one-hundred-year flood elevation, shall be floodproofed in a completely or essentially dry manner in accordance with the W1 or W2 space classification standards contained in the publication entitled "Flood-Proofing Regulations" published by the United States Army Corps of Engineers (June 1972) 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) Enclosed areas below the lowest floor (including basement) are prohibited.

§ 48-22. Design and construction standards.

The following minimum standards shall apply for all construction proposed to be undertaken within any identified flood-prone area.

A. Fill. If fill is used, it shall:

- (1) Extend laterally at least 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 vertical to two horizontal, unless substantiated data, justifying steeper slopes are submitted to, and approved by the designated Township official.
- (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 surface waters without damage to persons or property. The system shall ensure drainage at all points 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. Sanitary sewer facilities. All new or replacement sanitary sewer facilities and private package sewage treatment plants (including all pumping stations and collector systems) shall be designed to minimize or eliminate infiltration of floodwaters into the systems and discharges from the systems into the floodwaters. In addition, they should be located and constructed to minimize or eliminate flood damage and impairment. 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. **[Amended 3-19-2009]**

- D. Water facilities. All new or replacement water facilities shall be designed to minimize or eliminate infiltration of floodwaters into the system and be located and constructed to minimize or eliminate flood damages.
- E. Streets. The finished elevation of proposed new streets shall be no more than one foot below the regulatory flood elevation.
- F. Utilities. All utilities, such as gas lines, electrical and telephone systems, being placed in flood-prone areas should be located, elevated (where possible) and constructed to minimize the chance of impairment during a flood.
- G. Storage. No materials that are buoyant, flammable, explosive or that, in times of flooding, could be injurious to human, animal or plant life shall be stored below the regulatory flood elevation.
- H. 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 floodwater.
- I. 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.
- J. 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 that 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.
- K. 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.

L. Electrical systems and components.

- (1) Electric water heaters, furnaces, air conditioning and ventilating systems and other electrical equipment or apparatus shall not be located below the regulatory flood elevation.
- (2) Electrical distribution panels shall be at least three feet above the one-hundred-year flood elevation.
- (3) Separate electrical circuits shall serve lower levels and shall be dropped from above.

M. Plumbing.

- (1) Water heaters, furnaces and other mechanical equipment or apparatus shall not be located below the regulatory flood elevation.
- (2) On-site waste disposal systems shall be located so as to avoid impairment due to flooding.
- (3) Water supply systems and sanitary sewage systems shall be designed to prevent the infiltration of floodwaters into the system and discharges from the system into floodwaters.
- (4) All gas and soil supply systems shall be designed to prevent the infiltration of floodwaters into the system and discharges from the system into floodwaters. Additional provision shall be made for the drainage of these systems in the event that floodwater infiltration occurs.

§ 48-23. Manufactured homes. [Amended 12-2-1991 by Ord. No. 10C]

No manufactured homes shall be placed in any of the flood-prone areas as designated by the Flood Insurance Study dated February 1978, and prepared for the Township of Haines.

**ARTICLE V
Variances**

§ 48-24. Grant upon request.

If compliance with the elevation or floodproofing requirements of this chapter 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 requirement.