

ARTICLE 1327

FLOODWAY AND FLOOD-FRINGE DISTRICTS

1327.01 Purpose

The purpose of these provisions is to prevent the loss of property and life, the creation of health and safety hazards, the disruption of commerce and governmental services, the extraordinary and unnecessary expenditure of public funds for flood protection and relief, and the impairment of the tax base by:

- (a) Regulating uses, activities, and development which, acting alone or in combination with other existing or future uses, activities, and development, will cause unacceptable increases in flood heights, velocities and frequencies.
- (b) Restricting or prohibiting certain uses, activities, and development from locating within areas subject to flooding.
- (c) Requiring all those uses, activities, and developments that do occur in flood-prone areas to be protected and/or floodproofed against flooding and flood damage.
- (d) Protecting individuals from buying lands and structures which are unsuited for intended purposes because of flood hazards.

1327.02 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 acceptable engineering methods of study. Larger floods may occur on rare occasions. 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 the flood plain districts, or that land uses permitted within such districts will be free from flooding or flood damages. This Ordinance shall not create liability on the part of the City of Bethlehem or any officer or employee thereof for any flood damages that result from reliance on this Ordinance or any administrative decision lawfully made thereunder.

1327.03 Establishment of the Floodway and Flood-Fringe Districts

The flood and flood-fringe districts shall include all areas subject to inundation by waters of the one hundred (100) year flood (regulatory flood). The basis for the delineation of these districts shall be the Flood Insurance Study for the City of Bethlehem, prepared by the Federal Insurance Administration, a division of the Federal Emergency Management Agency, which is declared to be a part of this Ordinance. The floodway and flood-fringe districts shall be overlays to the

existing Zoning Map and, as such, the provisions for these two (2) Districts shall serve as a supplement to the Zoning District provisions. Where there happens to be any conflict between the provisions or requirements of either the floodway or flood fringe

district and those of any Zoning District, the more restrictive provisions shall apply. Prior to any revision of the delineation of any flood plain districts, approval must be obtained from the Federal Insurance Administration.

1327.04 District Provisions

Under no circumstances shall any use, activity and/or development reduce the carrying capacity of the channels or floodways of any watercourse, drainage ditch, or any other drainage facility or system. Prior to any proposed alteration or relocation of any stream, watercourse, or any other drainage facility within the City of Bethlehem, a permit shall be obtained from the Department of Environmental Protection, Dams and Encroachment Division. Further notification of the proposal shall be given to all affected adjacent municipalities. Copies of such notification shall be forwarded to both the Federal Insurance Administration and the Pennsylvania Department of Community and Economic Development.

1327.05 Floodway District

In the Floodway District no development shall be permitted except where the effect of such development on flood heights is fully offset by accompanying stream improvements which have been approved by the Pennsylvania Department of Environmental Protection, Dams and Encroachment Division.

- (a) Permitted Uses. In the Floodway District the following uses and activities are permitted provided that they are in compliance with the provisions of the Zoning District and are not prohibited by any other Ordinance and provided that they do not require structures, fill, or storage of materials and equipment.
- (1) Agricultural uses such as general farming, pasture, grazing, outdoor plant nurseries, horticulture, truck farming, forestry, sod farming, and wild crop harvesting.
 - (2) Public and private recreational uses and activities, such as parks, day camps, picnic grounds, golf courses, boat launching and swimming areas, hiking, and horseback riding trails, wildlife and nature preserves, game farms, fish hatcheries, and fishing areas.
 - (3) Miscellaneous uses such as yard areas, gardens, play areas, and pervious parking areas.

(b) Uses Permitted by Special Exception. The following uses and activities may be permitted by special exception provided that they are in compliance with the provisions of the underlying Zoning District and are not prohibited by any other Ordinance:

- (1) Structures accessory to the uses and activities in Section 1327.05(a).
- (2) Utilities and public facilities and improvements, such as railroads, streets, bridges, transmission lines, pipe lines, and other similar or related uses.
- (3) Water-related uses and activities, such as marinas, docks, wharves, piers, etc.
- (4) Extraction of sand, gravel, and other materials.
- (5) Temporary uses, such as circuses, carnivals, and similar activities.
- (6) Temporary storage of materials and equipment, provided that they are not buoyant, flammable or explosive, and are not subject to major damage by flooding, and can be readily removed from the area within the time available after flood warning.
- (7) Other similar uses and activities.

All uses, activities, and structural developments shall be undertaken in strict compliance with the flood-proofing provisions contained in all other applicable codes and ordinances.

(c) Variances. A variance shall not be issued for development within the floodway if any increase in the regulatory flood elevation would result.

(d) Regulation of Hazardous Materials.

(1) The production, storage, or maintenance of a supply of any of the following materials is prohibited within any Floodway District except as noted in Section (2):

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| (I) | Acetone |
| (II) | Ammonia |
| (III) | Benzene |
| (IV) | Calcium Carbide |
| (V) | Carbon Disulfide |
| (VI) | Celluloid |
| (VII) | Chlorine |
| (VIII) | Hydrochloric Acid |

(IX)

Hydrocyanic Acid

- (X) Magnesium
- (XI) Nitric Acid and Oxides of Nitrogen
- (XII) Petroleum Products (Gasoline, Fuel Oil, Etc.)
- (XIII) Phosphorus
- (XIV) Potassium
- (XV) Sodium
- (XVI) Sulphur and Sulphur Products
- (XVII) Pesticides (including Insecticide, Fungicides, and Rodenticides)
- (XVIII) Radioactive Substances
- (XIX) Other substances defined as hazardous waste under Section 75.261, Chapter 75, Title 25 of the Pennsylvania Code.

- (2) Except for radioactive substances, a supply of not more than 550 gallons or other comparable volume of the materials listed in (1) above may be maintained if required for the operation of a permitted use as specified in Section 1327.05(a) and (b). No radio- active substances shall be permitted within the Floodway District.

1327.06 Flood Fringe District

In the Flood Fringe District the development and/or use of land shall be permitted in accordance with the regulations of the underlying Zoning District provided that all such uses, activities, and/or development shall be undertaken in strict compliance with the flood-proofing and related provisions contained in all other applicable codes and ordinances.

- (a) Any structure, or substantial improvement to any structure which is used for the production, storage, or maintenance of a supply of any of the substances listed in Section 1327.05(d)(1) shall:
 - (1) Be 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 elevation.
 - (2) Be designed and constructed to prevent pollution from the structure or activity during the course of a one hundred (100) year flood.
 - (3) Be prohibited within the area measured fifty (50) feet landward from the top-of-bank of any watercourse.
- (b) Except for a possible modification of the one and one-half (1-1/2) foot freeboard requirement, no variance shall be granted for any of the other requirements of this subsection (a).

1327.07 Special Exceptions

In passing upon applications for special exceptions, the Zoning Hearing Board shall consider all relevant factors specified in other sections of the Ordinance and:

- (a) The danger to life and property due to increased flood heights or velocities caused by encroachments.
- (b) The danger that materials may be swept on to other lands or downstream to the injury of others.
- (c) The proposed water supply and sanitation systems and the ability of those systems to prevent disease, contamination, and unsanitary conditions.
- (d) The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owners.
- (e) The importance of the services provided by the proposed facility to the community.
- (f) The requirements of the facility for a water front location.
- (g) The availability of alternative locations not subject to flooding for the proposed use.
- (h) The compatibility of the proposed use with existing development and development anticipated in the foreseeable future.
- (i) The relationship of the proposed use to the comprehensive plan and flood plain management program for the area.
- (j) The safety of access to the property in times of flood of ordinary and emergency vehicles.
- (k) The expected heights, velocity, duration, rate of rise, and sediment transport of the flood waters expected at the site.
- (l) Such other factors which are relevant to the purpose of this Ordinance.

1327.08 Non-Conformities

A structure or use of a structure or premises which lawfully existed before the enactment of these provisions, but which is not in conformity with these provisions may be continued subject to the following conditions:

- (a) Existing non-conformities (structures and/or uses) located in the Floodway District shall not be expanded or enlarged (unless the

effect of the proposed expansion or enlargement on flood heights is fully offset by accompanying stream improvements).

- (b) The modification, alteration, repair, reconstruction, or improvement of any kind to a non-conformity (structure and/or use) regardless of location, to an extent or amount of fifty percent (50%) or more of its market value shall be undertaken only in full compliance with the provisions of the City Building Code.

1327.09

Activities and Uses Requiring a Special Permit

- (a) In accordance with the Pennsylvania Flood Plain Management Act (Act 1978-166) and regulations adopted by the Pennsylvania Department of Community and Economic Development as required by the Act, the following obstructions and activities are permitted only by Special Permit, if located partially or entirely within any established Flood-Fringe District:

- (1) Any new hospital, nursing home, jail, or mobile home park.
- (2) Any construction, enlargement, or alteration of a structure used, or intended to be used, for a hospital, nursing home, or jail.
- (3) Any substantial improvement to an existing mobile home park.

- (b) Application Requirements:

Applicants for Special Permits shall provide copies of the following items:

- (1) A written request including a completed Building Permit Application Form.
- (2) Ten (10) copies of complete development final plan(s) as described in Section 202 F.2 of the Subdivision and Development Ordinance, including the following additional information:
 - (I) Topography based upon the National Geodetic Vertical Datum of 1929, showing existing and proposed contours at two (2) foot intervals.
 - (II) Information concerning the flow of water in the Flood Plain including direction and velocities.
- (3) Five (5) copies of plans of all proposed buildings, structures and other improvements, clearly and legibly drawn at suitable scale showing the following:

- (I) Sufficiently detailed architectural or engineering drawings including floor plans, sections, and exterior building elevations, as appropriate;
 - (II) For any proposed building, the elevation of the lowest floor (including basement) and, as required, the elevation of any other floor;
 - (III) Complete information concerning flood depths, pressures, velocities, impact and uplift forces, and other factors associated with the one hundred (100) year flood;
 - (IV) Detailed information concerning any proposed flood-proofing measures;
 - (V) Cross-section drawings for all proposed streets, drives, other accessways, and parking areas showing all right-of-way and pavement widths;
 - (VI) Profile drawings for all proposed streets, drives, and vehicular accessways including existing and proposed grades; and
 - (VII) Plans and profiles of all proposed sanitary and storm sewer systems, water supply systems, and any other utilities and facilities.
- (4) Three (3) copies of the following data and documentation:
- (I) 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;
 - (II) 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;
 - (III) A statement, certified by a Registered Professional Engineer, Architect, Landscape Architect, 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 one hundred (100) year flood, including a statement concerning the effects such pollution may have on human life;

- (IV) A statement certified by a Registered Professional Engineer, which contains a complete and accurate description of the effects the proposed development will have on one hundred (100) year flood elevations and flows;

- (V) 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;
- (VI) The appropriate component of the Department of Environmental Protection "Planning Module for Land Development;"
- (VII) 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;
- (VIII) 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
- (IX) 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.

(c) Application Review Procedures

Upon receipt of an application for a Special Permit by the City Planning Office, the following procedures shall apply in addition to all other applicable permit procedures which are already established:

- (1) 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 as necessary shall also be forwarded to the City Building Inspector, Zoning Officer, Forester and Engineer for review and comment.

- (2) If an application is received that is incomplete, the City shall notify the applicant in writing, stating in what respect the application is deficient.

- (3) If the City Planning Commission decides to disapprove an application, it shall notify the applicant, in writing, of the reasons for the disapproval.
 - (4) If the City approves an application, it shall file written notification, together with the application and all pertinent information, with the Pennsylvania Department of Community and Economic Development, by registered mail, within five (5) working days after the date of approval.
 - (5) Before issuing the Special Permit, the City shall allow the Pennsylvania Department of Community and Economic Development thirty (30) days after receipt of the notification by the Department, to review the application and the decision made by the City.
 - (6) If the City does not receive any communication from the Pennsylvania Department of Community and Economic Development during the thirty (30) day review period, it may issue a Special Permit to the applicant.
 - (7) If the Pennsylvania Department of Community and Economic Development should decide to disapprove an application, it shall notify the City and the applicant, in writing, of the reasons for the disapproval, and the City shall not issue the Special Permit.
- (d) Technical Requirements for Development Requiring a Special Permit.

In addition to any other applicable requirements, the following provisions shall also apply to the activities requiring a Special Permit. If there is any conflict between any of the following requirements and any otherwise applicable provision, the more restrictive provisions shall apply.

- (1) 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:
 - (l) Fully protect the health and safety of the general public and any occupants of the structure. At a minimum, all new structures shall be designed, located and constructed so that:
 - (i) 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.

- (ii) The lowest floor elevation (including basement) will be at least one and one-half (1-1/2) feet above the one hundred (100) year flood elevation.

- (iii) 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.
- (II) Prevent any significant possibility of pollution, increased flood levels or flows, or debris endangering life and property.
- (2) All hydrologic and hydraulic analyses shall be undertaken only a Professional Engineer, 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 technical review by the City and the Pennsylvania Department of Community and Economic Development.
- (3) Any structure which requires a Special Permit shall be prohibited within the area measured fifty (50) feet horizontally from the top-of-bank of any watercourse.
- (4) Except for a possible modification of the freeboard requirement involved, no variance shall be granted for any of the other requirements of this Section.