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SPECIAL PURPOSE
FLOOD DAMAGE PREVENTION RESOLUTION

SECTION 1.0

STATUTORY AUTHORIZATION, FINDINGS OF FACT
PURPOSE AND OBJECTIVES

1.1 STATUTORY AUTHORIZATION

This resolution is adopted pursuant to authorization contained in Sections 307.37 and 307.85 of the Ohio Revised Code. This resolution adopts regulations for flood hazard areas that are necessary for participation in the National Flood Insurance Program. Therefore, the Board of County Commissioners of Warren County, Ohio, does resolve as follows:

1.2 FINDING OF FACT

- (1) The flood hazard areas of Warren County, Ohio, are subject to periodic inundation which may result in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood protection and relief, and impairment of the tax base, all of which adversely affect the public health, safety, and general welfare.
- (2) These flood losses are caused by the cumulative effect of obstructions in areas of special flood hazards which increase flood heights and velocities and, when inadequately anchored, such obstructions damage uses in other areas. Uses that are inadequately elevated, floodproofed, or otherwise protected from flood damage also contribute to the flood loss.

1.3 STATEMENT OF PURPOSE

It is the purpose of this resolution to promote the public health, safety and general welfare, and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:

- (1) Protect human life and health;

- (2) Minimize expenditure of public money for costly flood control projects;
- (3) Minimize the need for rescue and relief efforts associated with flooding and generally undertaken at the expense of the general public;
- (4) Minimize prolonged business interruptions;
- (5) Minimize damage to public facilities and utilities such as water and gas mains, electric, telephone and sewer lines, streets and bridges located in areas of special flood hazard;
- (6) Help maintain a stable tax base by providing for the proper use and development of areas of special flood hazard so as to minimize future flood blight areas;
- (7) Ensure that those who occupy the areas of special flood hazard assume responsibility for their actions.

1.4 METHODS OF REDUCING FLOOD LOSSES

In order to accomplish its purposes, this resolution includes methods and provisions for:

- (1) Restricting or prohibiting uses which are dangerous to health, safety, and property due to water hazards, or which result in damaging increases in flood heights or velocities;
- (2) Requiring that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction;
- (3) Controlling the alteration of natural floodplains, stream channels, and natural protective barriers which help accommodate or channel flood waters;
- (4) Controlling filling, grading, dredging and other development which may increase flood damage; and,
- (5) Preventing or regulating the construction of flood barriers which will unnaturally divert flood waters or which may increase flood hazards in other areas.

SECTION 2

DEFINITIONS

Unless specifically defined below, words or phrases used in this resolution shall be interpreted so as to give them the meaning they have in common usage and to give this resolution its most reasonable application.

“Accessory structure” means a structure on the same lot with, and of a nature customarily incidental and subordinate to, the principle structure.

“Appeal” means a request for review of the Chief Building Official or designee’s interpretation of any provision of this resolution or a request for a variance.

“Area of Special Flood Hazard” means the land in the floodplain subject to a one percent (1%) or greater chance of flooding in any given year. Areas of special flood hazard are designated by the Federal Emergency Management Agency (FEMA) as Zone A, AE, AH, A1-30, and X.

“Base Flood” means the flood having a one percent (1%) chance of being equaled or exceeded in any given year. The base flood may also be referred to as the one hundred (100) year flood.

“Basement” means any area of the building having its floor subgrade (below ground level) on all sides.

“Certification” of data is a statement that the data is accurate to the best of the certifier’s knowledge. Certification of analysis is a statement that the analyses have been performed correctly and in accordance with sound engineering practices. Certification of structural works is a statement that the works are designed in accordance with sound engineering practices to provide protection from the base flood. Certification of “as built” conditions is a statement that the structure(s) has been built according to the plans being certified, is in place and is fully functioning.

“Development” means any man-made change to improved or unimproved real estate, including but not limited to, buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations or storage of equipment or materials.

“Federal Emergency Management Agency” (FEMA) means the agency with the overall responsibility for administering the National Flood Insurance Program.

“Flood” or “Flooding” means a general and temporary condition of partial or complete inundation of normally dry land areas from:

- (1) The overflow of inland or tidal waters, and/or
- (2) The unusual and rapid accumulation or runoff of surface waters from any source.

“Flood Insurance Rate Map” (FIRM) means an official map on which the Federal Emergency Management Agency (FEMA) has delineated the areas of special flood hazard.

“Flood Insurance Study” means the official report in which the Federal Emergency Management Agency (FEMA) has provided flood profiles, floodway boundaries, and the water surface elevations of the base flood.

“Floodway” means the channel of a river or other watercourse and adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one (1) foot.

“Historic Structure” means any structure that is:

- (1) Listed individually in the National Register of Historic Places (a listing maintained by the U.S. Department of the Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listings on the National Register;
- (2) Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered district or a district preliminarily determined by the Secretary to qualify as a registered historic district;
- (3) Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of the Interior; or,
- (4) Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either:
 - i. By an approved state program as determined by the Secretary of Interior ; or,
 - ii. Directly by the Secretary of the Interior in states without approved programs.

“Lowest Floor” means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure usable solely for parking of vehicles, building access or storage, in an area other than a basement area, is not considered a building’s lowest floor provided that such enclosure is built in accordance with the applicable design requirements specified in this resolution for enclosures below the lowest floor.

“Manufactured Home” means a structure, transportable in one (1) or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when connected to the required utilities. The term “manufactured home” does not include a “recreational vehicle”.

“Manufactured Home Park” means a parcel (or contiguous parcels) of land divided into two (2) or more manufactured home lots for rent. This definition shall exclude any manufactured home park, as defined in Section 3733.01 of the Ohio Revised Code, for which the Ohio Public Health Council has exclusive rule making power.

“Manufactured Home Subdivision” means a parcel (or contiguous parcels) of land divided into two (2) or more manufactured home lots for sale. This definition shall exclude any manufactured home park, as defined in Section 3733.01 of the Ohio Revised Code, for which the Ohio Public Health Council has exclusive rule making power.

“New Construction” means structures for which the “start of construction” commenced on or after April 15, 1981, the initial effective date of the Warren County, Ohio’s, Flood Insurance Rate Map, and includes any subsequent improvements to such structures.

“Recreational Vehicle” means a vehicle which is (1) built on a single chassis; (2) four hundred (400) square feet or less when measured at the largest horizontal projection; (3) designed to be self-propelled or permanently towable by a light duty truck; and (4) designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel or seasonal use.

“Start of Construction” means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, rehabilitation, addition, placement or other improvement was within one hundred eighty (180) days of the permit date. 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 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 the building, whether or not that alteration affects the external dimensions of a building.

“Structure” means a walled and roofed building, manufactured home, or gas or liquid storage tank that is principally above ground.

“Substantial Damage” means damage of any origin sustained by a structure, whereby the cost of restoring the structure to its before damaged condition, would equal or exceed fifty per cent (50%) of the market value of the structure before the the damage occurred. Substantial damage also means flood related damage sustained by a structure on two (2) separate occasions during a ten (10) year period for which the costs of repairs at the time of each such flood event, on the average, equals or exceeds twenty-five per cent (25%) market value of the structure before the damage occurred.

“Substantial improvement” means any reconstruction, rehabilitation, addition, or other improvement of a structure, the cost of which equals or exceeds fifty percent (50%) of the market value of the structure before the “start of construction” of the improvement. This term includes structures which have incurred “substantial damage”, regardless of the actual repair work performed. The term does not, however, include:

- (1) 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;
- (2) Any alteration of a “historic structure”, provided that the alteration will not preclude the structure’s continued designation as a “historic structure”; or
- (3) Any improvement to a structure which is considered new construction.

“Variance” means a grant of relief from the standards of this resolution consistent with the variance conditions herein.

SECTION 3.0

GENERAL PROVISIONS

3.1 LANDS TO WHICH THIS RESOLUTION APPLIES

This resolution shall apply to all areas of special flood hazard within the jurisdiction of Warren County, Ohio, as identified by the Federal Emergency Management Agency (FEMA), including any additional flood hazard areas annexed by Warren County, Ohio, that are not identified on the effective Flood Insurance Rate Map.

3.2 BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD HAZARD

The areas of special flood hazard have been identified by the Federal Emergency Management Agency (FEMA) in a scientific and engineering report entitled “ Flood Insurance Study for Warren County, Ohio”. This study with accompanying Flood Boundary and Floodway Maps and/or Flood Insurance Rate Maps, dated September 21, 2000, and any revisions thereto is hereby adopted by reference and declared to be a part of this resolution. The Flood Insurance Study is on file at the Warren County Building and Zoning Department, Warren County Administration Building, 406 Justice Drive, Room #167/170, Lebanon, Ohio 45036.

3.3 COMPLIANCE

No structure or land shall hereafter be located, erected, constructed, reconstructed, repaired, extended, converted, enlarged or altered without full compliance with the terms of this resolution and all other applicable regulations which apply to uses within the jurisdiction of this resolution, and unless specifically exempted from filing for a Development Permit as stated in Section 4.2 Exemption From Filing A Development Permit.

3.4 ABROGATION AND GREATER RESTRICTIONS

This resolution is not intended to repeal, abrogate, or impair any existing easements, covenants or deed restrictions. However, where this resolution and another resolution, easement, covenant or deed restriction conflict or overlap, whichever imposes the more stringent restrictions shall prevail.

3.5 INTERPRETATION

In the interpretation and application of this resolution, all provisions shall be:

- (1) Considered as minimum requirements;
- (2) Liberally construed in favor of the governing body; and
- (3) Deemed neither to limit nor repeal any other powers granted under state statutes. Where a provision of this resolution may be in conflict with a state law, such state law shall take precedence over this resolution.

3.6 WARNING AND DISCLAIMER OF LIABILITY

The degree of flood protection required by this resolution is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur on rare occasions. Flood heights may be increased by man-made or natural causes. This resolution does not imply that land outside the areas of special flood hazard or uses permitted within such areas will be free from flooding or flood damage. This resolution shall not create liability on the part of Warren County, Ohio, any officer or employee thereof, or the Federal Emergency Management Agency (FEMA) for any flood damage that results from reliance on this resolution or any administrative decision lawfully made thereunder.

3.7 VIOLATIONS AND PENALTIES

Violation of the provisions of this resolution or failure to comply with any of its requirements shall constitute a misdemeanor. Any person who violates this resolution or fails to comply with any of its requirements (including violations of conditions and safeguards established in connection with conditions) shall upon conviction thereof be fined or imprisoned as provided by the laws of Warren County, Ohio. Each day such violation continues shall be considered a separate offense. Nothing herein contained shall prevent Warren County, Ohio, from taking such other lawful action as is necessary to prevent or remedy any violation. Warren County, Ohio, shall prosecute any violation of this resolution in accordance with the penalties stated herein.

3.8 APPEAL TO THE COURT

Any person or persons adversely affected by this resolution or by any decision of the Chief Building Official or designee may appeal to the Warren County Court of Common Pleas.

3.9 SEVERABILITY

Should any section or provision of this resolution be declared by the courts to be unconstitutional or invalid, such decision shall not affect the validity of the resolution as a whole or any part thereof other than the part so declared to be unconstitutional or invalid.

SECTION 4.0

ADMINISTRATION

4.1 ESTABLISHMENT OF DEVELOPMENT PERMIT

A Development Permit shall be obtained from the Chief Building Official or designee before construction or development begins within any area of special flood hazard established in Section 3.2 Basis for Establishing the Areas of Special Flood Hazard. Application for a Development Permit shall be made on forms furnished by the Chief Building Official or designee and may include, but not be limited to, site specific topographic plans drawn to scale showing the nature, location, dimensions, and elevations of the area in question; existing or proposed structures, fill, storage of materials, drainage facilities, and the location of the foregoing. The following information is required:

- (1) Elevation in relation to mean sea level of the lowest floor, including basement, of all proposed structures located in special flood hazard areas where base flood elevation data are utilized;
- (2) Elevation in relation to mean sea level to which any proposed structure will be floodproofed in accordance with Section 5.2-2 (1) where base flood elevation data are utilized;
- (3) Certification by a registered professional engineer or architect that the floodproofing methods for any nonresidential structure meet the floodproofing criteria in Section 5.2-2 (1) where base flood elevation data are utilized;
- (4) Description of the extent to which any watercourse will be altered or relocated as a result of the proposed development and certification by a registered professional engineer that the flood carrying capacity of the watercourse will not be diminished;

- (5) Certification by a registered professional engineer, architect, or surveyor of the structure's as-built lowest floor including basement, elevation or of the nonresidential floodproofed elevation.

4.2 EXEMPTION FROM FILING A DEVELOPMENT PERMIT

An application for a Development Permit shall not be required for maintenance work such as roofing, painting, and basement sealing, or for small nonstructural development activities (except for filling and grading) valued at not less than \$1,000.00. Any proposed action exempt from filing for a Development Permit is also exempt from the standards of this resolution.

4.3 DESIGNATION OF THE FLOOD DAMAGE PREVENTION RESOLUTION ADMINISTRATOR

The Chief Building Official or designee is hereby appointed to administer and implement this resolution by granting or denying development permit applications in accordance with its provisions.

4.4 DUTIES AND RESPONSIBILITIES OF THE CHIEF BUILDING OFFICIAL OR DESIGNEE

The duties and responsibilities of the Chief Building Official or designee shall include, but are not limited to:

4.4-1 PERMIT REVIEW

- (1) Review all development permit applications to determine that the permit requirements of this resolution have been satisfied.
- (2) Review all development permit applications to assure that all necessary permits have been received from those federal, state or local governmental agencies from which prior approval is required. The applicant shall be responsible for obtaining such permits as required including permits issued by the Department of the Army under Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act.
- (3) Review all development permit applications to determine if the proposed development is located within a designated floodway. Floodways are delineated in the Flood Boundary and Floodway Map or the Flood Insurance Rate Map of the Flood Insurance Study. Floodways may also be delineated in other sources of flood

information. If the proposed development is located within a designated floodway, assure that the encroachment provision of Section 5.3 (1) is met.

4.4-2 USE OF OTHER BASE FLOOD ELEVATION AND FLOODWAY DATA

Areas of special flood hazard where base flood elevation data have not been provided by the Federal Emergency Management Agency (FEMA) in accordance with Section 3.2 Basis for Establishing the Areas of Special Flood Hazard are designated as Zone A on the Flood Insurance Rate Map. Within these areas, the Chief Building Official or designee shall obtain, review and reasonably utilize any base flood elevation and floodway data available from a federal, state or other source, including data obtained under Section 5.2-6 Specific Standards, Subdivisions and Large Developments, in order to administer Section 5.2-1 Specific Standards, Residential Construction; Section 5.2-2 Specific Standards, Nonresidential Construction; and Section 5.3 Floodways.

4.4-3 INFORMATION TO BE OBTAINED AND MAINTAINED BY THE WARREN COUNTY BUILDING AND ZONING DEPARTMENT

Where base flood elevation data are utilized within areas of special flood hazard on a community's Flood Insurance Rate Map, regardless of the source of such data, the following provisions apply:

- (1) Obtain and record the actual elevation (in relation to mean sea level) of the lowest floor, including basement, of all new or substantially improved structures, and record whether or not such structures contain an enclosure below the lowest floor.
- (2) For all new or substantially improved floodproofed nonresidential structures:
 - (i) verify and record the actual elevation (in relation to mean sea level) to which the structure was floodproofed; and,
 - (ii) maintain the floodproofing certifications required in Section 4.1 (3).
- (3) Maintain for public inspection all records pertaining to the provisions of this resolution.

4.4-4 ALTERATION OF WATERCOURSES

- (1) Notify adjacent communities and the Ohio Department of Natural Resources, Division of Water, prior to any alteration or relocation of a watercourse, and submit evidence of such notification to the Federal Emergency Management Agency (FEMA). A watercourse is considered to be altered if any change occurs within its banks.
- (2) Maintain engineering documentation required in Section 4.1 (4) that the flood carrying capacity of the altered or relocated portion of said watercourse will not be diminished.
- (3) Require that necessary maintenance will be provided for the altered or relocated portion of said watercourse so that the flood carrying capacity will not be diminished.

4.4-5 INTERPRETATION OF FLOOD BOUNDARIES

Make interpretations, where needed, as to the exact location of the boundaries of the areas of special flood hazard (for example, where there appears to be a conflict between a mapped boundary and actual field conditions). Where a map boundary and field elevations disagree, the elevations delineated in the flood elevation profile shall prevail. The person contesting the location of the boundary shall be given reasonable opportunity to appeal the interpretation as provided in Section 4.5 Variance Procedure.

4.4-6 ALTERATION OF COMMUNITY BOUNDARIES

Upon occurrence, notify FEMA in writing whenever the boundaries of Warren County, Ohio, have been modified by annexation or the community has assumed authority over an area; or, no longer has authority to adopt and enforce floodplain management regulations for a particular area. In order that Warren County, Ohio's, Flood Insurance Rate Map accurately represent the jurisdictional boundaries, include within such notification a copy of a map of Warren County, Ohio, suitable for reproduction, clearly delineating the new corporate limits or the new area for which Warren County, Ohio, has assumed or relinquished floodplain management regulatory authority.

4.5 VARIANCE PROCEDURE

4.5-1 VARIANCE BOARD

- (1) A variance board (hereafter referred to as the "Board") is hereby established for granting variances from the floodplain management requirements of this resolution where owing to special conditions a

literal enforcement of the provisions of this resolution will result in unnecessary hardship. The Board shall consist of three (3) members to be appointed by the Board of County Commissioners. The members shall serve three (3) year terms after which time they shall be reappointed or replaced by the Board of County Commissioners. Vacancies shall be filled for the unexpired term of any member whose position becomes vacant. A chairperson shall be elected by the members of the Board.

- (2) Meetings of the Board shall be held as needed. All meetings of the Board shall be open to the public. The Board shall keep minutes of its proceedings reflecting the vote of each member upon each question and shall keep records of all official actions. The records shall be open for public review.
- (3) Upon the filing with the Board for a variance request the Board shall set a date for a public hearing and shall arrive at a decision within fifteen (15) days after the hearing.
- (4) Appeals from any decision of the Board may be taken by any person or persons aggrieved by any decision of the Board to the Warren County Court of Common Pleas.
- (5) In passing upon a variance request, the Board shall consider all technical evaluations, all relevant factors, standards specified in other sections of this resolution, and:
 - (i) the danger that materials may be swept onto other lands to the injury of others;
 - (ii) the danger to life and property due to flooding or erosion damage;
 - (iii) the susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner;
 - (iv) the importance of the services provided by the proposed facility to the community;
 - (v) the availability of alternative locations for the proposed use which are not subject to flooding or erosion damage;
 - (vi) the necessity to the facility of a waterfront location, where applicable;
 - (vii) the compatibility of the proposed use with existing and anticipated development;

- (viii) the relationship of the proposed use to the comprehensive plan and floodplain management program for that area;
 - (ix) the safety of access to the property in times of flood for ordinary and emergency vehicles;
 - (x) the expected heights, velocity, duration, rate of rise, and sediment transport of the flood waters and the effects of wave action, if applicable, expected at the site; and,
 - (xi) the costs of providing governmental services during and after flood conditions, including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, and water systems, and streets and bridges.
- (6) Upon consideration of the factors of Section 4.5-1 (5) and the purposes of this resolution, the Board may attach such conditions to the granting of variances as it deems necessary to further the purposes of this resolution.
- (7) The Chief Building Official or designee shall maintain the records of all appeal actions and report any variances to the Federal Emergency Management Agency (FEMA) upon request.

4.5-2 CONDITIONS FOR VARIANCES

- (1) Variances shall not be issued within any designated floodway if any increase in flood levels during the base flood discharge would result.
- (2) Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
- (3) Generally, variances may be issued for new construction and substantial improvements to be erected on a lot one-half (1/2) acre or less in size contiguous to and surrounded by lots with existing structures constructed below the base flood level, providing items (i-xi) in Section 4.5-1 (5) have been fully considered. As lot size increases beyond one half (1/2) acre, the technical justification required for issuing the variance increases.
- (4) Variances may be issued for the repair or rehabilitation of historic structures upon a determination that the proposed repair or rehabilitation will not preclude the structure's continued designation as a historic structure and the variance is the minimum necessary to preserve the historic character and design of the structure.

- (5) Variances shall only be issued upon:
- (i) a showing of good and efficient cause;
 - (ii) a determination that failure to grant the variance would result in exceptional hardship to the applicant;
 - (iii) a determination that the granting of a variance will not result in increased flood heights beyond that which is allowed in this resolution, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud on or victimization of the public as identified in Section 4.5-1 (5), or conflict with existing local laws or ordinances; and,
- (6) Any applicant to whom a variance is granted shall be given written notice that the structure will be permitted to be built with a lowest floor elevation below the base flood elevation and the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation.

4.6 FEES

An application fee, as established by the Board of County Commissioners, shall be charged for development permits and variance requests.

SECTION 5.0

PROVISIONS FOR FLOOD HAZARD REDUCTION

5.1 GENERAL STANDARDS

The following standards apply in all areas of special flood hazard including those where base flood elevation data have been provided. Where a structure, including its foundation members, is elevated on fill to or above the base flood level, the requirements for Section 5.1 Anchoring and Section 5.2 Construction Materials and Methods are satisfied.

5.1-1 ANCHORING

- (1) All new construction and substantial improvements shall be anchored to prevent flotation, collapse, or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy.

- (2) All manufactured homes, not otherwise regulated by the Ohio Revised Code pertaining to manufactured home parks, shall be anchored to prevent flotation, collapse or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy. Methods of anchoring may include, but are not limited to, use of over-the-top or frame ties to ground anchors.

5.1-2 CONSTRUCTION MATERIALS AND METHODS

- (1) All new construction and substantial improvements shall be constructed with materials resistant to flood damage.
- (2) All new construction and substantial improvements shall be constructed using methods and practices that minimize flood damage; and
- (3) All new construction and substantial improvements shall be constructed with electrical, heating, ventilation, plumbing and air conditioning equipment and other service facilities that are designed and/or elevated so as to prevent water from entering or accumulating within the components during conditions of flooding.

5.1-3 UTILITIES

The following standards apply to all water supply, sanitary sewerage and waste disposal systems not otherwise regulated by the Ohio Revised Code:

- (1) All new and replacement water supply systems shall be designed to minimize or eliminate infiltration of flood waters into the systems;
- (2) New and replacement sanitary sewerage systems shall be designed to minimize or eliminate infiltration of flood waters into the systems and discharge from the systems into flood waters; and,
- (3) On site waste disposal systems shall be located to avoid impairment to them or contamination from them during flooding.

5.1-4 SUBDIVISION PROPOSALS

- (1) All subdivision proposals, including manufactured home subdivisions, shall be consistent with the need to minimize flood damage;
- (2) All subdivision proposals, including manufactured home subdivisions, shall have public utilities and facilities such as sewer, gas, electrical, and water systems located and constructed to minimize flood damage;

- (3) All subdivision proposals, including manufactured home subdivisions, shall have adequate drainage provided to reduce exposure to flood damage; and

- (4) All subdivision proposals, including manufactured home subdivisions, shall meet the specific standards of Section 5.2-6 Subdivisions and Large Developments.

5.1-5 STANDARDS IN AREAS OF SPECIAL FLOOD HAZARD WITHOUT BASE FLOOD ELEVATION DATA

In all areas of special flood hazard identified as Zone A on the Flood Insurance Rate Map where base flood elevation data are not available from any source, the following provisions apply:

- (1) New construction and substantial improvement of any residential, commercial, industrial, or other nonresidential structure shall have the lowest floor, including basement, elevated to at least two (2) feet above the highest adjacent natural grade.

5.2 SPECIFIC STANDARDS

In all areas of special flood hazard where base flood elevation data have been provided as set forth in Section 3.2 Basis for Establishing the Areas of Special Flood Hazard; Section 4.4-2 Use of Other Base Flood Elevation and Floodway Data; or Section 5.2-6 Subdivisions and Large Developments, the following additional provisions are required:

5.2-1 RESIDENTIAL CONSTRUCTION

- (1) New construction and substantial improvement of any residential structure shall have the lowest floor, including basement, one (1) foot above the base flood elevation.

5.2-2 NONRESIDENTIAL CONSTRUCTION

- (1) New construction and substantial improvement of any commercial, industrial or other nonresidential structure shall either have the lowest floor, including basement, elevated to the level of the base flood elevation; or, together with attendant utility and sanitary facilities, shall:

- (i) be floodproofed so that the structure is watertight with walls substantially impermeable to the passage of water to the level of the base flood elevation. In order to be eligible for lower flood insurance rates, the structure should be floodproofed at least one (1) foot above the base flood elevation;
- (ii) have structural components capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy; and,
- (iii) be certified by a registered professional engineer or architect that the design and methods of construction are in accordance with accepted standards of practice for meeting the standards of this subsection. Such certification shall be provided to the official as set forth in Section 4.1 (3).

5.2-3 ACCESSORY BUILDINGS

- (1) A relief to the elevation or dry floodproofing standards may be granted for accessory structures (e.g. sheds, detached garages) containing no more than five hundred seventy-six (576) square feet or less in gross floor area. Such structures must meet the encroachment provisions in Section 5.3 (1) and the following additional standards:
 - (i) they shall not be used for human habitation;
 - (ii) they shall be constructed of flood resistant materials;
 - (iii) they shall be constructed and placed on the building site so as to offer the minimum resistance to the flow of floodwaters;
 - (iv) they shall be firmly anchored to prevent flotation;
 - (v) service facilities such as electrical and heating equipment shall be elevated or floodproofed to or above the level of the base flood elevation; and,
 - (vi) they shall meet the opening requirements of Section 5.2-5.

5.2-4 MANUFACTURED HOMES AND RECREATIONAL VEHICLES

The following standards shall apply to all new and substantially improved manufactured homes not subject to the manufactured home park requirements of Section 3733.01, Ohio Revised Code:

- (1) Manufactured homes shall be anchored in accordance with Section 5.1-1 (2).
- (2) Manufactured homes shall be elevated on a permanent foundation such that the lowest floor of the manufactured home is at or above the base flood elevation.

These standards shall also apply to all recreational vehicles that are either (i) located on sites for one hundred (180) days or more, or (ii) are not fully licensed and ready for highway use.

5.2-5 ENCLOSURES BELOW THE LOWEST FLOOR

The following standards apply to all new and substantially improved residential and nonresidential structures which are elevated to the base flood elevation using pilings, columns or posts. Fully enclosed areas below the lowest floor that are useable solely for parking of vehicles, building access or storage in an area other than a basement and which are subject to flooding shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must:

- (1) Be certified by a registered professional engineer or architect; or,
- (2) Must meet or exceed the following criteria:
 - (i) a minimum of two (2) openings having a total net area of not less than one (1) square inch for every square foot of enclosed area subject to flooding shall be provided.
 - (i) the bottom of all openings shall be no higher than one (1) foot above grade. Openings may be equipped with screens, louvers, valves or other coverings provided that they permit the automatic entry and exit of floodwaters.

5.2-6 SUBDIVISIONS AND LARGE DEVELOPMENTS

In all areas of special flood hazard where base flood elevation data have not been provided in accordance with Section 3.2 Basis for Establishing the Areas of Special Flood Hazard or Section 4.4-2 Use of Other Base Flood Elevation Data, the following standards apply to all subdivision proposals, including manufactured home subdivisions, and other proposed developments containing at least fifty (50) lots or five (5) acres (whichever is less):

- (1) The applicant shall provide base flood elevation data performed in accordance with standard engineering practices;
- (2) If Section 5.2-6 (1) is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of Section 5.1 General Standards and Section 5.2 Specific Standards.

5.3 FLOODWAYS

5.3-1 AREAS WITH FLOODWAYS

The Flood Insurance Study referenced in Section 3.2 identifies a segment within areas of special flood hazard known as a floodway. Floodways may also be delineated in other sources of flood information as specified in Section 4.4-2. The floodway is an extremely hazardous area due to the velocity of floodwaters which carry debris, potential projectiles, and cause erosion potential. The following provisions apply within all delineated floodway areas:

- (1) Prohibit encroachments, including fill, new construction, substantial improvements, and other development unless a hydrologic and hydraulic analysis performed in accordance with standard engineering practices demonstrates that the proposed encroachment would not result in any increase in flood levels during the occurrence of the base flood discharge.
- (2) If Section 5.3-1 (1) is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of Section 5.2 Specific Standards.
- (3) Any encroachment within the floodway that would result in an increase in base flood elevations can only be granted upon the prior approval by the Federal Emergency Management Agency (FEMA). Such requests must be submitted by the Chief Building Official or designee to the Federal Emergency Management Agency (FEMA) and must meet the requirements of the National Flood Insurance Program.

5.3-2 AREAS WITHOUT FLOODWAYS

In all areas of special flood hazard where FEMA has provided base flood elevation data as set forth in Section 3.2, but FEMA has not delineated a floodway, the following provisions apply:

- (1) New construction, substantial improvements, or other development (including fill) shall only be permitted if it is demonstrated that the cumulative effect of any proposed development, when combined with all other existing and anticipated development, shall not increase the water surface elevation of the base flood more than one (1) foot at any point.
- (2) If Section 5.3-2 (1) is satisfied, all new construction and substantial improvements shall comply with all applicable flood hazard reduction provisions of Section 5.0 Provisions for Flood Hazard Reduction.

SECTION 6.0

In accordance with Ohio Revised Code 307.37 public hearings were held on the 10th day of June 1997 and the 17th day of June 1997 at regular meetings of the Board of County Commissioners.

Adopted by the Board of County Commissioners on this 24th day of June 1997.

Roll call vote:

Mr. Kilburn - yea
Ms. South - yea
Mr. Crisenbery - yea

Attest: s/s Tina Davis, Clerk

Resolution No. 88-421 adopted on 17th day of May 1988 is hereby repealed.

HISTORY

Flood Damage Prevention Regulations adopted and added to the Warren County Revised Building Code, March 10, 1981.
County Commissioners' Resolution #81-152.

CODE AMENDMENTS:

Amended: April 21, 1987.
County Commissioners' Resolution #87-262.

Amended: May 17, 1988.
County Commissioners' Resolution #88-421.

Amended: June 24, 1997.
County Commissioners' Resolution #97-860.

Amended: January 27, 1998.
County Commissioners' Resolution #98-87.

Amended: October 3, 2000.
County Commissioners' Resolution #00-1697.

