

SPECIAL PURPOSE
FLOOD DAMAGE PREVENTION REGULATIONS

SECTION 1.0

STATUTORY AUTHORIZATION, FINDINGS OF FACT
PURPOSE AND OBJECTIVES

1.1 STATUTORY AUTHORIZATION

This resolution is adopted pursuant to authorization contained in Section 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 Butler County, does resolve as follows:

1.2 FINDINGS OF FACT

(1) The flood hazard areas of the unincorporated areas of Butler County 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, damage uses in other areas. Uses that are inadequately floodproofed, elevated 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, protect the natural function of streams, and to minimize public 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 potential buyers are aware that property is in an area of special flood hazard; and,
- (8) 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 flood plains, 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 2.0

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 principal structure.

"Appeal" means a request for review of the Butler County Building Administrator's interpretation of any provision of this resolution or a request for a variance.

"Area of shallow flooding" means a designated AO or AH zone on a community's Flood Insurance Rate Map (FIRM) with a one percent or greater annual chance of flooding to an average depth of one to three feet where a clearly defined channel does not exist, where the path of flooding is unpredictable and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow.

"Area of special flood hazard" means the land in the flood plain subject to a one percent and/or greater chance of flooding in any given year. Areas of special flood hazard are designated by the Federal Emergency Management Agency (hereafter referred to as "FEMA") as Zone A, AE, AH, AO, A1-30, and A99.

Any area outside the FEMA studied areas lying along blue line streams as shown on the United States Department of the Interior Geological Survey (hereafter referred to as "USGS") quadrants of which Butler County is contained and/or areas with flood prone soils which are contiguous to blue line streams as shown on the Butler County Flood Prone Soils Map shall also be considered special flood hazard areas.

Butler County is contained within the following USGS quadrants: College Corner, Oxford, West Elkton, Middletown, Franklin, Reily, Millville, Hamilton, Trenton, Monroe, Harrison, Shandon, Greenhills, Glendale, and Mason.

"Base flood" means the flood having a one percent chance of being equalled 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 below ground level on all sides.

"Blue Line Stream" means creeks or streams which are indicated on the USGS quadrants of which Butler County is contained.

"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 has delineated the areas of special flood hazard.

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

"Flood Prone Soils Map" means a map indicating soils subject to inundation by water from overflow of streams and formed in materials deposited on the land surface by this water.

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

"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 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 historic 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 the 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 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 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 Public Health Council has exclusive rule making power.

"Manufactured home subdivision" means a parcel (or contiguous parcels) of land divided into two 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 Public Health Council has exclusive rule making power.

"New construction" means structures for which the "start of construction" commenced on or after the initial effective date of the Butler County Flood Insurance Rate Map and applicable Flood Prone Soils 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, replacement, or other improvements was within 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 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 a building.

"Stream Buffer" a vegetated area, including trees, shrubs, and herbaceous vegetation, that exists or is established to protect a stream's natural functions. Alteration of this natural area is limited, except as otherwise stated in these regulations.

"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 percent (50%) of the market value of the structure before the damage occurred. Substantial damage also means flood related damage sustained by a structure on two separate occasions during a 10-year period for which the cost of repairs at the time of each such flood event, on the average, equals or exceeds 25 percent of the 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.

“Top of Bank” the area of the stream channel that is the bank full level of the channel. See illustrations.

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

“Violation” means the failure of a structure or other development to be fully compliant with this resolution.

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 unincorporated Butler County as identified by the Federal Emergency Management Agency.

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 in a scientific and engineering report entitled "Flood Insurance Study for unincorporated Butler County."

This study, revised January 21, 1998, with accompanying USGS quadrants in which Butler County is contained, Butler County Flood Prone Soils Map, Flood Boundary and Floodway Maps and/or Flood Insurance Rate Maps effective at the time that this resolution is adopted and as those documents may thereafter be amended are hereby adopted by reference and declared to be a part of this resolution. The Flood Insurance Study is on file at 130 High Street, Hamilton, Ohio 45011.

Any area outside the studied area lying along blue line streams as shown on the USGS quadrants of which Butler County is contained and/or areas with flood prone soils which are contiguous to blue line streams as shown on the Butler County Flood Prone Soils Map, also shall be considered special flood hazard areas.

3.3 COMPLIANCE

No structure or land shall hereafter be located, erected, constructed, 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, 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 the 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 hazards or uses permitted within such areas will be free from flooding or flood damages. This resolution shall not create liability on the part of Butler County, any officer or employee thereof, or the Federal Emergency Management Agency, for any flood damages that result 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 not more than \$300.00 and in addition, shall pay all costs and expenses involved in the case. Each day such violation continues shall be considered a separate offense. Nothing herein contained shall prevent unincorporated Butler County from taking such other lawful action as is necessary to prevent or remedy any violation. Butler County shall prosecute any violation of this resolution in accordance with the penalties stated herein.

3.8 APPEAL TO THE BOARD

Any person or persons adversely affected by this resolution or by any decision of the Butler County Building and Zoning Administrator may appeal to the Butler County Residential Board of Appeals.

SECTION 4.0

ADMINISTRATION

4.1 ESTABLISHMENT OF DEVELOPMENT PERMIT

A Development Permit shall be obtained from the Butler County Building and Zoning Administrator 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 Butler County Building and Zoning Administrator and may include, but not be limited to: site specific topographic plans in duplicate, drawn to scale, showing the nature, location, dimensions, and elevations of the area in question, and showing 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) of this resolution 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) of this resolution where base flood elevation data are utilized; and
- (4) description of the extent to which any watercourse will be altered or relocated as a result of proposed development and certification by a registered professional engineer that the flood carrying capacity of the watercourse will not be diminished.

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 development activities (except for filling and grading) valued at less than \$1,000.00. Any proposed action exempt from filing for a Development Permit is also exempt from the standards of this resolution. Construction of storage sheds and fences are not exempt.

4.3 DESIGNATION OF THE FLOOD DAMAGE PREVENTION REGULATION ADMINISTRATOR

The Butler County Building and Zoning Administrator is hereby appointed to administer and implement this resolution by granting or denying development permit applications in accordance with its provisions.

4.4 ~~BUILDING AND RESPONSIBILITIES OF THE~~ BUTLER COUNTY

The duties and responsibilities of the Butler County Building and Zoning Inspector shall include but are not limited to:

4.4-1 Permit Review

- (1) Review all development permits to determine that the permit requirements of this resolution have been satisfied.
- (2) Review all development permits 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 permits 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 of this resolution 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 in accordance with Section 3.2, **BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD HAZARD**, are designated as Zone A on the county's Flood Insurance Rate Map. Within these areas, the Butler County Building and Zoning Administrator 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, **SUBDIVISIONS AND LARGE DEVELOPMENTS**, in order to administer Section 5.2-1, **SPECIFIC STANDARDS, Residential Construction**; 5.2-2, **SPECIFIC STANDARDS, Nonresidential Construction**; and 5.3, **FLOODWAYS**.

4.4-3 Information to be Obtained and Maintained

Where base flood elevation data are utilized within areas of special flood hazard, 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 whether or not such structures contain an enclosure below the lowest floor.
- (2) For all new or substantially-improved floodproofed structures;
 - (i) verify and record the actual elevation (in relation to mean sea level) to which the structure was floodproofed; and,
 - (ii) maintain the flood proofing certification required in Section 4.1(3) of this resolution.
- (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. A watercourse is considered to be altered if any change occurs within its banks.
- (2) Maintain engineering documentation required in Section 4.1 (4) of this resolution 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 a reasonable opportunity to appeal the interpretations as provided in Section 4.5, VARIANCE PROCEDURE.

4.5 VARIANCE PROCEDURE

4.5-1 Variance Board

- (1) The Butler County Residential Board of Appeals (hereafter referred to as the "Board") is hereby empowered to grant variances from the flood plain 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 seven 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 of a variance request with the Board, the Board shall set a date for a public hearing and shall arrive at a decision within thirty (30) 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 Butler County Court of Common Pleas.
- (5) In deciding 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 damages;
 - (iii) the susceptibility of the proposed facility and its contents to flood damage and the effect of such

- (iv) damage on the individual owner;
 - (v) the importance of the services provided by the proposed facility to the county;
 - (vi) the availability of alternative locations for the proposed use which are not subject to flooding or erosion damage;
 - (vii) the necessity to the facility of a waterfront location, where applicable;
 - (viii) the compatibility of the proposed use with existing and anticipated development;
 - (ix) the relationship of the proposed use to the comprehensive plan and flood plain management program for that area;
 - (x) the safety of access to the property in times of flood for ordinary and emergency vehicles;
 - (xi) 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
 - (xii) 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 Butler County Building and Zoning Administrator shall maintain the records of all appeal actions and report any variances to the Federal Emergency Management Agency 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, unless the applicant has first secured and presented either a:
- (i) FEMA LOMR - Letter of Map Revision; or a
 - (ii) CLOMR - Conditional Letter of Map Revision.
- (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 of one-half acres 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 the lot size increases beyond the one-half 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 sufficient cause
 - (ii) a determination that failure to grant the variance would result in exceptional hardship to the applicant; and,
 - (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 indicated in Section 4.5-1(5), or conflict with existing local laws or ordinances.
- (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 that the cost of flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation.

SECTION 5.0

PROVISIONS FOR FLOOD HAZARD REDUCTION

5.1 GENERAL STANDARDS

In all areas of special flood hazards the following standards are required:

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.
- (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 redesigned and/or located 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 sewage 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 sewage 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 water 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

- (1) 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 provision applies:

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 three feet (3') above the highest adjacent natural grade.

- (2) In all areas of special flood hazard identified as an area outside the studied area

lying along blue line streams and/or areas with flood prone soils which are contiguous to blue line streams as shown on the Butler County Flood Prone Soils Map, the following provision applies:

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 one foot (1') above the 100 year base flood elevation as determined by a registered professional engineer employed by the applicant, or elevate the lowest floor, including basement, to at least three feet (3') above the highest adjacent natural grade.

5.2 SPECIFIC STANDARDS

In all areas of special flood hazards where base flood elevation data have been provided as set forth in Section 3.2, BASIS FOR ESTABLISHING THE AREAS OF SPECIAL FLOOD HAZARD, or Section 4.4-2, Use of Other Base Flood Elevation and Floodway Data, or Section 5.2-6, Subdivisions and Large Developments, the following 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, elevated to at least one foot (1') above the base flood elevation.
- (2) In AO zones new construction and substantial improvements shall have the lowest floor, including basement, elevated above the highest adjacent grade at least one foot (1') above the depth number on the community's Flood Insurance Rate Map. Adequate drainage paths shall be provided around structures on slopes, to guide floodwaters around and away from proposed structures.

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 at least one foot (1') above 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 at least one foot (1') 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 Butler County Building and Zoning Administrator as set forth in Section 4.1(3) of this resolution.
- (2) In AO zones new construction and substantial improvements shall either have the lowest floor, including basement, elevated above the highest adjacent grade at least one foot (1') above the depth number on the community's Flood Insurance Rate Map; or be floodproofed to that level consistent with the floodproofing standards of Section 5.2-2(1) (i), (ii), (iii) of this resolution, and adequate drainage paths shall be provided around structures on slopes, to guide floodwaters around and away from proposed structures.

5.2-3 Accessory Structures

- (1) Relief from the elevation or dry floodproofing standards may be granted for accessory structures (e.g. sheds, detached garages) containing 576 square feet or less in gross floor area. Such structures must meet the encroachment provisions of Section 5.3-1 of this resolution and the following additional standards:
- (i) they shall not be used for human habitation;
 - (ii) they shall be designed to have low flood damage potential;
 - (iii) they shall be constructed and placed on the building site so as to offer the minimum resistance to the flow of flood waters;
 - (iv) they shall be firmly anchored to prevent flotation; and
 - (v) service facilities such as electrical and heating equipment shall be elevated or floodproofed.

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 requirements of Section 3733.01, Ohio Revised Code.

- (1) Manufactured homes shall be anchored in accordance with Section 5.1-1(2) of this resolution, and
- (2) Manufactured homes shall be elevated on a permanent foundation such that the lowest floor of the manufactured home is at least one foot (1') above the base flood elevation.

These standards also apply to recreational vehicles that are either (i) located on sites for 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 at least one foot (1') above the base flood elevation using pilings, columns, or posts. Fully enclosed areas below the lowest floor that are usable solely for parking of vehicles, building access or storage in an area other than a basement 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 openings having a total net area of not less than one square inch for every square foot of the enclosed area shall be provided.
 - (ii) the bottom of all openings shall be no higher than one foot above grade. Openings may be equipped with screens, louvers, valves or other openings 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 50 lots or 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.

5.2-7 All Filling of Special Flood Hazard Areas

All filling of areas of special flood hazard outside of floodways are permitted subject to the Development Permit requirements of Section 4.1 of this resolution, providing the volume of fill placed in the flood hazard area is compensated by equal volume of soil excavated in the same flood area. The excavated area shall be designed to act as a backwater storage area to the main channel. This storage area shall have a direct opening to the main channel approximately one foot above the two-year flood elevation. The excavated area shall be a recorded easement and shall be maintained by the appropriate party, i.e. property owner or Property Owners Association.

5.2-8 Mill Creek Levees

When “development” involving the excavation of in excess of 1,000 cubic yards of dirt occurs on a parcel that contains a levee which was constructed for the protection from the Mill Creek, and is 300' or more in length, the existing levee shall be notched or altered in some manner to make it disfunctional. A new levee shall be established at a distance of 75' from the top of bank (TOB) to the center line of the levee. The effective height of the new levee shall be no higher than that of the existing levee. See illustration I-1.

In the event that the levee is already 75' or greater from the TOB it is to be strengthened on the land side to protect it from scour.

The riparian corridor shall also be preserved, except as otherwise permitted in these regulations.

All work in this section must also be in conformance with the “Floodway” standards as described in Section 5.3-1 and 5.3-2 of these regulations.

5.2-9 Public Access

Floodplain easements established under these regulations shall provide for public access for purposes of inspection and enforcement of these regulations, and the regulations as adopted by Butler County. The establishment of these easements does not in itself provide for public maintenance of these facilities.

5.2-10 As-Builts

Within sixty (60) days of the completion of all construction performed in a “Flood Hazard Area”, as-built drawings are to be submitted. These as-built plans shall indicate the final location and elevation of the ground, building floors, parking lots, sidewalks, streets, storm sewers, manhole inverts, buffers, levees and easements.

5.2-11 Stream Buffer

For the purposes of flood damage prevention, erosion control, and storm water management a stream buffer shall be maintained for all waterways identified as Special Flood Hazard Areas on the FEMA Firm Maps. A stream buffer for FEMA defined streams shall consist of undisturbed and/or natural areas of land extending along both sides of the stream. The stream buffer shall begin at the top of bank of the stream and shall be a minimum of 75' on each side of the stream. The following structures, practices, and activities are permitted in the buffer, with specific design or maintenance features, subject to the review of the Department:

- (1) Roads, bridges, foot- and bike-paths, stormwater management facilities, levees and utilities.
 - a. The right-of-way should be the minimum width needed to allow for maintenance access and installation.
 - b. The angle of the crossing shall be as close to perpendicular to the stream or buffer as possible in order to minimize clearing requirements.
 - c. When constructing, the area cleared will be limited to the area required for construction and adequate maintenance access.

The buffer shall be preserved or improved to include native vegetation such as sand bar willows, black or white willows, sycamore, silky dogwood, eastern or swamp cottonwood and native riparian grasses. Compaction of the soil shall be minimized to the greatest extent practical. Specific features may be recommended pursuant to the permit requirements in Section 4.1 of these regulations.

The following practices and activities are restricted within the buffer, except with approval by the Department:

- (1) Clearing of existing vegetation.
- (2) Soil disturbance by grading, stripping, or other practices.
- (3) Filling or dumping.

- (4) Use, storage, or application of pesticides, except for spot spraying of noxious weeds or non-native species consistent with recommendations of Ohio DNR.
- (5) Storage or operation of motorized vehicles, except for maintenance and emergency use approved by the Department.

5.3 FLOODWAYS

5.3-1 Areas with Floodways

The Flood Insurance Study referenced in Section 3.2 of this resolution 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 of this resolution. The floodway is an extremely hazardous area due to the velocity of flood waters which carry debris, potential projectiles, and 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 encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge.
- (2) If Section 5.3-1 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.
- (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. Such requests must be submitted by the Butler County Building and Zoning Administrator to the Federal Emergency Management Agency 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 of this resolution, 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 foot (1') 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.