

ORDINANCE NO. 2024-024

**BEING A NEW FLOODPLAIN MANAGEMENT ORDINANCE FOR
DELAWARE COUNTY, INDIANA**

WHEREAS, in the interest of promoting the public health, safety, and general welfare and minimizing public and private losses due to flood conditions in specific areas throughout the unincorporated territory of Delaware County, Indiana; and

WHEREAS, in the interest of protecting human life and health, minimizing expenditures of public money for costly flood control projects, minimizing the need for rescue and relief efforts associated with flooding, minimizing prolonged business interruptions, minimizing 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, and maintaining a stable tax base by minimizing the potential for creating flood blighted areas; and

WHEREAS, these goals can best be accomplished by guiding development in flood hazard areas to reduce the potential for loss of life and property, reduce the potential for health and safety hazards, and reduce the potential for extraordinary public and private expenditures for flood protection and relief; and

WHEREAS, there is a need to replace the existing floodplain management ordinance to incorporate new definitions and provisions imposed by the National Flood Insurance Program and the Federal Emergency Management Agency, including new digital flood maps for the unincorporated territory of Delaware County, Indiana.

NOW, THEREFORE, BE IT ORDAINED by the Board of Commissioners of Delaware County, Indiana as follows:

Section 1. That Delaware County Code Title 3, HEALTH AND ENVIRONMENT, Chapter 11, FLOODPLAIN MANAGEMENT, containing Ordinance 2017-013, be deleted in its entirety.

Section 2. That a new Chapter 11, FLOODPLAIN MANAGEMENT shall be inserted, with appropriate recodification, as follows:

Article 7. Severability.

If any section, clause, sentence, or phrase of the Ordinance is held to be invalid or unconstitutional by any court of competent jurisdiction, then said holding shall in no way effect the validity of the remaining portions of this Ordinance.

Article 8. Effective Date.

This ordinance shall be in full force and effect on _____.

Passed and enacted by the Board of County Commissioners of Delaware County, Indiana on the
4 day of November, 2024.

**Board of County Commissioners
Delaware County, Indiana**

James King, President



Sherry Riggin, Vice President



Shannon Henry, Member

ATTEST:



Edward E. Carroll Jr., Auditor

Article 1. Statutory Authorization, Findings of Fact, Purpose, and Objectives.

Section A. Statutory Authorization.

The Indiana Legislature has in IC 36-1-4-11 granted the power to local government units to control land use within their jurisdictions. Therefore, the County Commissioners of Delaware County, Indiana do hereby adopt the following floodplain management regulations.

Section B. Findings of Fact.

- (1) The flood hazard areas of Delaware County are subject to periodic inundation which results 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 floodplains causing increases in flood heights and velocities, and by the occupancy in flood hazard areas by uses vulnerable to floods or hazardous to other lands which are inadequately elevated, inadequately flood-proofed, or otherwise unprotected from flood damages.

Section C. Methods of Reducing Flood Loss.

- (1) Restrict or prohibit uses which are dangerous to health, safety, and property due to water or erosion hazards, which result in damaging increases in erosion or in flood heights or velocities.
- (2) Require that uses vulnerable to floods, including facilities which serve such uses, be protected against flood damage at the time of initial construction.
- (3) Control the alteration of natural floodplains, stream channels, and natural protective barriers which are involved in the accommodation of flood waters.
- (4) Control filling, grading, dredging, and other development which may increase erosion or flood damage.
- (5) Prevent or regulate the construction of flood barriers which will unnaturally divert floodwaters or which may increase flood hazards to other lands.

Section D. Statement of Purpose.

It is the purpose of this ordinance 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 floodplains.
- (6) Help maintain a stable tax base by providing for the sound use and development of flood prone areas in such a manner as to minimize flood blight area.
- (7) Ensure that those who occupy the areas of special flood hazard assume responsibility for their actions.
- (8) Minimize the impact of development on adjacent properties within and near flood prone areas.
- (9) Ensure that the flood storage and conveyance functions of the floodplain are maintained.
- (10) Minimize the impact of development on the natural, beneficial values of the floodplain.
- (11) Prevent floodplain uses that are either hazardous or environmentally incompatible.
- (12) Making federal flood insurance available for structures and their contents in the County by fulfilling the requirements of the National Flood Insurance Program.

Article 2. Definitions.

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

A zone means portions of the SFHA in which the principal source of flooding is runoff from rainfall, snowmelt, or a combination of both. In A zones, floodwaters may move slowly or rapidly, but waves are usually not a significant threat to buildings. These areas are labeled as Zone A, Zone AE, Zones A1-A30, Zone AO, Zone AH, Zone AR and Zone A99 on a FIRM. The definitions are presented below:

Zone A: Areas subject to inundation by the one-percent annual chance flood event. Because detailed hydraulic analyses have not been performed, no base flood elevation or depths are shown.

Zone AE and A1-A30: Areas subject to inundation by the one-percent annual chance flood event determined by detailed methods. Base flood elevations are shown within these zones. (Zone AE is on new and revised maps in place of Zones A1-A30.)

Zone AO: Areas subject to inundation by one-percent annual chance shallow flooding (usually sheet flow on sloping terrain) where average depths are between one and three feet. Average flood depths derived from detailed hydraulic analyses are shown within this zone.

Zone AH: Areas subject to inundation by one-percent annual chance shallow flooding (usually areas of ponding) where average depths are between one and three feet. Average flood depths derived from detailed hydraulic analyses are shown within this zone.

Zone AR: Areas that result from the decertification of a previously accredited flood protection system that is determined to be in the process of being restored to provide base flood protection.

Zone A99: Areas subject to inundation by the one-percent annual chance flood event, but which will ultimately be protected upon completion of an under-construction Federal flood protection system. These are areas of special flood hazard where enough progress has been made on the construction of a protection system, such as dikes, dams, and levees, to consider it complete for insurance rating purposes. Zone A99 may only be used when the flood protection system has reached specified statutory progress toward completion. No base flood elevations or depths are shown.

Accessory Structure means a structure with a floor area of 400 square feet or less that is on the same parcel of property as a principal structure and the use of which is incidental to the use of the principal structure; an accessory structure specifically excludes structures used for human habitation.

- (1) Accessory structures are considered walled and roofed where the structure includes at least two outside rigid walls and a fully secured roof.
- (2) Examples of accessory structures include but are not necessarily limited to two-car detached garages (or smaller), carports, storage and tool sheds, and small boathouses.
- (3) The following may have uses that are incidental or accessory to the principal structure on a parcel but are generally not considered to be accessory structures by the NFIP:
 - a. Structures in which any portion is used for human habitation, whether as a permanent residence or as temporary or seasonal living quarters, such as a detached garage or carriage house that includes an apartment or guest quarters, or a detached guest house on the same parcel as a principal residence.
 - b. Structures used by the public, such as a place of employment or entertainment.
 - c. Development that does not meet the NFIP definition of a structure for floodplain management purposes. Examples include, but are not necessarily limited to, a gazebo, pavilion, picnic shelter, or carport that is open on all sides (roofed but not walled).

Addition (to an existing structure) means any walled and roofed expansion to the perimeter of a structure in which the addition is connected by a common load-bearing wall other than a firewall. Any walled and roofed addition, which is connected by a firewall or is separated by independent perimeter load-bearing walls, is new construction.

Alteration of a watercourse means a dam, impoundment, channel relocation, change in channel alignment, channelization, or change in cross-sectional area of the channel or the channel capacity, or any other modification which may alter, impede, retard, or change the direction and/or velocity of the flow of water during conditions of the base flood.

Appeal means a request for a review of the floodplain administrator's interpretation of any provision of this ordinance, a request for a variance, or a challenge of a board decision.

Area of shallow flooding means a designated AO or AH Zone on the community's Flood Insurance Rate Map (FIRM) with base flood depths from one to three feet where a clearly defined channel does not exist, where the path of flooding is unpredictable and indeterminate, and where velocity flow may be evident. Such flooding is characterized by ponding or sheet flow.

Area of special flood hazard is the land within a community subject to a one percent (1%) or greater chance of being flooded in any given year.

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 1% annual chance flood or one hundred (100) year flood.

Base Flood Elevation (BFE) means the water surface elevation of the base flood in relation to a specified datum, usually the North American Vertical Datum of 1988.

Basement means that portion of a structure having its floor sub-grade (below ground level) on all sides.

Best Available Flood Layer (BAFL) means floodplain studies and any corresponding floodplain maps prepared and/or approved by the Indiana Department of Natural Resources which provide base flood elevation information, floodplain limits, and/or floodway delineations for flood hazards identified by approximate studies on the currently effective FIRM (Zone A) and/or for waterways where the flood hazard is not identified on available floodplain mapping.

Building - see "Structure."

Community means a political entity that has the authority to adopt and enforce floodplain ordinances for the area under its jurisdiction.

Community Rating System (CRS) means a program developed by the Federal Insurance Administration to provide incentives for those communities in the Regular Program that have gone beyond the minimum floodplain management requirements to develop extra measures to provide protection from flooding.

Critical facility means a facility for which even a slight chance of flooding might be too great. Critical facilities include, but are not limited to, schools, nursing homes, hospitals, police, fire, and emergency response installations, installations which produce, use or store hazardous materials or hazardous waste.

Development means any man-made change to improved or unimproved real estate including but not limited to:

- (1) construction, reconstruction, or placement of a structure or any addition to a structure;
- (2) installing a manufactured home on a site, preparing a site for a manufactured home or installing a recreational vehicle on a site for more than 180 days;
- (3) installing utilities, erection of walls and fences, construction of roads, or similar projects;
- (4) construction of flood control structures such as levees, dikes, dams, channel improvements, etc.;
- (5) mining, dredging, filling, grading, excavation, or drilling operations;
- (6) construction and/or reconstruction of bridges or culverts;
- (7) construction and/or reconstruction of boat lifts, docks, piers, and seawalls;
- (8) storage of materials; or
- (9) any other activity that might change the direction, height, or velocity of flood or surface waters.

"Development" does not include activities such as the maintenance of existing structures and facilities such as painting; re-roofing; resurfacing roads; or, gardening, plowing, and similar agricultural practices that do not involve filling, grading, excavation, or the construction of permanent structures.

Elevated structure means a non-basement structure built to have the lowest floor elevated above the ground level by means of fill, solid foundation perimeter walls, filled stem wall foundations (also called chain walls), pilings, or columns (posts and piers).

Elevation Certificate means a FEMA form that is routinely reviewed and approved by the White House Office of Management and Budget under the Paperwork Reduction Act, that is encouraged to be used to collect certified elevation information.

Enclosed area (enclosure) is an area of a structure enclosed by walls on all sides.

Emergency Program means the first phase under which a community participates in the NFIP. It is intended to provide a first layer amount of insurance at subsidized rates on all insurable structures in that community before the effective date of the initial FIRM.

Encroachment means the advance or infringement of uses, fill, excavation, buildings, permanent structures or development into a floodplain, which may impede or alter the flow capacity of a floodplain.

Existing Construction means any structure for which the "start of construction" commenced before the effective date of the community's first floodplain ordinance.

Existing manufactured home park or subdivision means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including, at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed before the effective date of the community's first floodplain ordinance.

Expansion to an existing manufactured home park or subdivision means the preparation of additional sites by the construction of facilities for servicing the lots on which the manufactured homes are to be affixed (including the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads).

FEMA means the Federal Emergency Management Agency.

Fill for floodplain management purposes, means any material deposited or placed which has the effect of raising the level of the ground surface above the natural grade elevation. Fill material includes but is not limited to consolidated material such as concrete and brick and unconsolidated material such as soil, sand, gravel, and stone.

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.
- (2) The unusual and rapid accumulation or runoff of surface waters from any source.
- (3) Mudslides (i.e., mudflows) which are proximately caused by flooding and are akin to a river of liquid and flowing mud on the surfaces of normally dry land areas, as when earth is carried by a current of water and deposited along the path of the current.

Flood or flooding also includes the collapse or subsidence of land along the shore of a lake or similar body of water as a result of erosion or undermining caused by waves or current of water exceeding anticipated cyclical levels that result in a flood as defined above.

Flood Boundary and Floodway Map (FBFM) means an official map on which the Federal Emergency Management Agency (FEMA) or Federal Insurance Administration (FIA) has delineated the areas of flood hazards and regulatory floodway.

Flood hazard area means areas subject to the one percent (1%) annual chance flood. (See “Special Flood Hazard Area”)

Flood Insurance Rate Map (FIRM) means an official map of a community, on which FEMA has delineated both the areas of special flood hazard and the risk premium zones applicable to the community. A FIRM that has been made available digitally is called a Digital Flood Insurance Rate Map (DFIRM).

Flood Insurance Study (FIS) is the official hydraulic and hydrologic report provided by FEMA. The report contains flood profiles, as well as the FIRM, FBFM (where applicable), and the water surface elevation of the base flood.

Flood Protection Grade (FPG) is the elevation of the regulatory flood plus two feet at any given location in the SFHA. (see “Freeboard”)

Floodplain or flood prone area means any land area susceptible to being inundated by water from any source. (see “Flood”)

Floodplain management means the operation of an overall program of corrective and preventive measures for reducing flood damage and preserving and enhancing, where possible, natural resources in the floodplain, including but not limited to emergency preparedness plans, flood control works, floodplain management regulations, and open space plans.

Floodplain management regulations means this ordinance and other zoning ordinances, subdivision regulations, building codes, health regulations, special purpose ordinances, and other applications of police power which control development in flood-prone areas. This term describes federal, state, or local regulations in any combination thereof, which provide standards for preventing and reducing flood loss and damage. Floodplain management regulations are also referred to as floodplain regulations, floodplain ordinance, flood damage prevention ordinance, and floodplain management requirements.

Floodproofing (dry floodproofing) is a method of protecting a structure that ensures that the structure, together with attendant utilities and sanitary facilities, is watertight to the floodproofed design elevation with walls that are substantially impermeable to the passage of water. All structural components of these walls are capable of resisting hydrostatic and hydrodynamic flood forces, including the effects of buoyancy, and anticipated debris impact forces.

Floodproofing certificate is a form used to certify compliance for non-residential structures as an alternative to elevating structures to or above the FPG. This certification must be by a Registered Professional Engineer or Architect.

Floodway is 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 cumulative increasing the water surface elevation more than a designated height.

Freeboard means a factor of safety, usually expressed in feet above the BFE, which is applied for the purposes of floodplain management. It is used to compensate for the many unknown factors that could contribute to flood heights greater than those calculated for the base flood.

Fringe or Flood Fringe is the portion of the floodplain lying outside the floodway.

Functionally dependent use means a use which cannot perform its intended purpose unless it is located or carried out in close proximity to water. The term includes only docking facilities, port facilities that are necessary for the loading and unloading of cargo or passengers, and ship building and ship repair facilities, but does not include long-term storage or related manufacturing facilities.

Hardship (as related to variances of this ordinance) means the exceptional hardship that would result from a failure to grant the requested variance. The Board of Zoning Appeals requires that the variance is exceptional, unusual, and peculiar to the property involved. Mere economic or financial hardship alone is NOT exceptional. Inconvenience, aesthetic considerations, physical handicaps, personal preferences, or the disapproval of one's neighbors likewise cannot, as a rule, qualify as an exceptional hardship. All of these problems can be resolved through other means without granting a variance, even if the alternative is more expensive, or requires the property owner to build elsewhere or put the parcel to a different use than originally intended.

Highest adjacent grade means the highest natural elevation of the ground surface, prior to the start of construction, next to the proposed walls of a structure.

Historic structure means any structure that is:

- (1) listed individually in the National Register of Historic Places (a listing maintained by the Department of the Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing 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 by (a) an approved state program as determined by the Secretary of Interior, or (b) directly by the Secretary of Interior in states without approved programs.

Hydrologic and hydraulic engineering analysis means analyses performed by a professional engineer licensed by the State of Indiana, in accordance with standard engineering practices that are accepted by the Indiana Department of Natural Resources and FEMA, used to determine the base flood, other frequency floods, flood elevations, floodway information and boundaries, and flood profiles.

Increased Cost of Compliance (ICC) means the cost to repair a substantially damaged structure that exceeds the minimal repair cost and that is required to bring a substantially damaged structure into compliance with the local flood damage prevention ordinance. Acceptable mitigation measures are elevation, relocation, demolition, or any combination thereof.

International Code Council-Evaluation Service (ICC-ES) Report means a document that presents the findings, conclusions, and recommendations from a particular evaluation. ICC-ES reports provide information about what code requirements or acceptance criteria were used to evaluate a product, and how the product should be identified, installed.

Letter of Final Determination (LFD) means a letter issued by FEMA during the mapping update process which establishes final elevations and provides the new flood map and flood study to the community. The LFD initiates the six-month adoption period. The community must adopt or amend its floodplain management regulations during this six-month period unless the community has previously incorporated an automatic adoption clause.

Letter of Map Change (LOMC) is a general term used to refer to the several types of revisions and amendments to FEMA maps that can be accomplished by letter. They are broken down into the following categories:

- (1) **Conditional Letter of Map Revision (CLOMR)** means FEMA's comment on a proposed project that would, upon construction, result in modification of the SFHA through the placement of fill outside the existing regulatory floodway.
- (2) **Conditional Letter of Map Revision Based on Fill (CLOMR-F)** means a letter from FEMA stating that a proposed structure that will be elevated by fill would not be inundated by the base flood.
- (3) **Letter of Map Amendment (LOMA)** means an amendment by letter to the currently effective FEMA map that establishes that a building or area of land is not located in a SFHA through the submittal of property specific elevation data. A LOMA is only issued by FEMA.
- (4) **Letter of Map Amendment Out as Shown (LOMA-OAS)** means an official determination by FEMA that states the property or building is correctly shown outside the SFHA as shown on an effective NFIP map. Therefore, the mandatory flood insurance requirement does not apply. An out-as-shown determination does not require elevations.
- (5) **Letter of Map Revision (LOMR)** means an official revision to the currently effective FEMA map. It is issued by FEMA and changes flood zones, delineations, and elevations.
- (6) **Letter of Map Revision Based on Fill (LOMR-F)** means FEMA's modification of the SFHA shown on the FIRM based on the placement of fill outside the existing regulatory floodway.

Lowest adjacent grade means the lowest elevation, after completion of construction, of the ground, sidewalk, patio, deck support, or basement entryway immediately next to the structure.

Lowest floor means the lowest elevation described among the following:

- (1) The top of the lowest floor of the structure.
- (2) The top of the basement floor.
- (3) The top of the garage floor, if the garage is the lowest level of the structure.
- (4) The top of the first floor of a structure elevated on pilings or pillars.
- (5) The floor level of any enclosure, other than a basement, below an elevated structure where the walls of the enclosure provide any resistance to the flow of floodwaters. Designs for meeting the

flood opening requirement must either be certified by a registered professional engineer or architect or meet or exceed the following criteria:

- a. The walls are designed to automatically equalize the hydrostatic flood forces on the walls by allowing for the entry and exit of floodwaters.
 - b. At least two (2) openings are designed and maintained for the entry and exit of floodwater; and these openings provide a total net area of at least one (1) square inch for every one (1) square foot of enclosed area. The bottom of all such openings shall be no higher than one (1) foot above the exterior grade or the interior grade immediately beneath each opening, whichever is higher. Doorways and windows do not qualify as openings.
- (6) The first floor of a building elevated on pilings or columns in a coastal high hazard area (as that term is defined in 44 CFR 59.1), as long as it meets the requirements of 44 CFR 60.3.

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 attached to the required utilities. The term "manufactured home" does not include a "recreational vehicle."

Manufactured home park or subdivision means a parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.

Map panel number is the four-digit number followed by a suffix assigned by FEMA on a flood map. The first four digits represent the map panel, and the letter suffix represents the number of times the map panel has been revised. (The letter "A" is not used by FEMA, the letter "B" is the first revision).

Market value means the building value, excluding the land (as agreed to between a willing buyer and seller), as established by what the local real estate market will bear. Market value can be established by independent certified appraisal, replacement cost depreciated by age of building (actual cash value), or adjusted assessed value.

Mitigation means sustained actions taken to reduce or eliminate long-term risk to people and property from hazards and their effects. The purpose of mitigation is twofold: to protect people and structures, and to minimize the cost of disaster response and recovery.

National Flood Insurance Program (NFIP) is the federal program that makes flood insurance available to owners of property in participating communities nationwide through the cooperative efforts of the Federal Government and the private insurance industry.

National Geodetic Vertical Datum (NGVD) of 1929 as corrected in 1929 is a vertical control used as a reference for establishing varying elevations within the floodplain.

Natural grade for floodplain management purposes means the elevation of the undisturbed natural surface of the ground. Fill placed prior to the date of the initial identification of the flood hazard on a FEMA map is also considered natural grade.

New construction for floodplain management purposes means any structure for which the "start of construction" commenced on or after the effective date of a floodplain management regulations adopted by a community and includes any subsequent improvements to such structures.

New manufactured home park or subdivision means a manufactured home park or subdivision for which the construction of facilities for servicing the lots on which the manufactured homes are to be

affixed (including at a minimum, the installation of utilities, the construction of streets, and either final site grading or the pouring of concrete pads) is completed on or after the effective date of the community's first floodplain ordinance.

Non-boundary river floodway means the floodway of any river or stream other than the part of the Ohio River that forms the boundary between Kentucky and Indiana.

North American Vertical Datum of 1988 (NAVD 88) as adopted in 1993 is a vertical control datum used as a reference for establishing varying elevations within the floodplain.

Obstruction includes, but is not limited to, any dam, wall, wharf, embankment, levee, dike, pile, abutment, protection, excavation, canalization, bridge, conduit, culvert, building, wire, fence, rock, gravel, refuse, fill, structure, vegetation, or other material in, along, across or projecting into any watercourse which may alter, impede, retard or change the direction and/or velocity of the flow of water; or due to its location, its propensity to snare or collect debris carried by the flow of water, or its likelihood of being carried downstream.

One-percent annual chance flood is the flood that has a one percent (1%) chance of being equaled or exceeded in any given year. Any flood zone that begins with the letter A is subject to the one-percent annual chance flood. See "Regulatory Flood".

Physical Map Revision (PMR) is an official republication of a community's FEMA map to effect changes to base (1-percent annual chance) flood elevations, floodplain boundary delineations, regulatory floodways, and planimetric features. These changes typically occur as a result of structural works or improvements, annexations resulting in additional flood hazard areas, or correction to base flood elevations or SFHAs.

Post-FIRM construction means construction or substantial improvement that started on or after the effective date of the initial FIRM of the community or after December 31, 1974, whichever is later.

Prefabricated Building is a building that is manufactured and constructed using prefabrication. It consists of factory-made components or units that are transported and assembled on-site to form the complete building.

Principally above ground means that at least 51 percent of the actual cash value of the structure, less land value, is above ground.

Pre-FIRM construction means construction or substantial improvement, which started on or before December 31, 1974, or before the effective date of the initial FIRM of the community, whichever is later.

Probation is a means of formally notifying participating communities of violations and deficiencies in the administration and enforcement of the local floodplain management regulations.

Public safety and nuisance mean anything which is injurious to the safety or health of an entire community, neighborhood or any considerable number of persons, or unlawfully obstructs the free passage or use, in the customary manner, of any navigable lake, or river, bay, stream, canal, or basin.

Recreational vehicle means a vehicle which is (1) built on a single chassis; (2) 400 square feet or less when measured at the largest horizontal projections; (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 quarters for recreational camping, travel, or seasonal use.

Regulatory flood means the flood having a one percent (1%) chance of being equaled or exceeded in any given year, as calculated by a method and procedure that is acceptable to and approved by the Indiana Department of Natural Resources and the Federal Emergency Management Agency. The regulatory flood elevation at any location is as defined in Article 3, Section B of this ordinance. The "Regulatory Flood" is also known by the term "Base Flood", "One-Percent Annual Chance Flood", and "100-Year Flood".

Repetitive loss means flood-related damages 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, equaled or exceeded 25% of the market value of the structure before the damage occurred.

Riverine means relating to, formed by, or resembling a river (including tributaries), stream, brook, etc.

Solid waste disposal facility means any facility involved in the storage or disposal of non-liquid, non-soluble materials ranging from municipal garbage to industrial wastes that contain complex and sometimes hazardous substances. Solid waste also includes sewage sludge, agricultural refuse, demolition wastes, mining wastes, and liquids and gases stored in containers.

Special Flood Hazard Area (SFHA), synonymous with "areas of special flood hazard" and floodplain, means those lands within the jurisdiction of the County subject to a one percent (1%) or greater chance of flooding in any given year. Special flood hazard areas are designated by the Federal Emergency Management Agency on Flood Insurance Rate Maps, Flood Insurance Studies, Flood Boundary and Floodway Maps and Flood Hazard Boundary Maps as Zones A, AE, AH, AO, A1-30, A99, or AO. The SFHA includes areas that are flood prone and designated from other federal, state or local sources of data including but not limited to best available flood layer maps provided by or approved by the Indiana Department of Natural Resources, historical flood information reflecting high water marks, previous flood inundation areas, and flood prone soils associated with a watercourse.

Start of construction includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, or improvement 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 a 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, foundations, or the erection of temporary forms; nor does it include the installation on the property of accessory buildings, such as garages or sheds not occupied as dwelling units or not part of the main structure. For a substantial improvement, the actual start of construction means the first alteration of any wall, ceiling, floor, or other structural part of a building, whether or not that alteration affects the external dimensions of the building.

Structure means a structure that is principally above ground and is enclosed by walls and a roof. The term includes a gas or liquid storage tank, a manufactured home, or a prefabricated building. The term also includes recreational vehicles to be installed on a site for more than 180 consecutive days.

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 50 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 50 percent of the market value of the structure before the "start of construction" of the improvement. This term includes structures that have incurred "repetitive loss" or

“substantial damage” regardless of the actual repair work performed. The term does not include improvements of structures to correct existing violations of state or local health, sanitary, or safety code requirements which have been identified by the local code enforcement official and which are the minimum necessary to assure safe living conditions.

Suspension means the removal of a participating community from the NFIP because the community has not enacted and/or enforced the proper floodplain management regulations required for participation in the NFIP.

Variance is a grant of relief from the requirements of this ordinance consistent with the variance conditions herein.

Violation means the failure of a structure or other development to be fully compliant with this ordinance. A structure or other development without the elevation, other certification, or other evidence of compliance required in this ordinance is presumed to be in violation until such time as that documentation is provided.

Walled and Roofed means a building that has two or more exterior rigid walls and a fully secured roof and is affixed to a permanent site.

Watercourse means a lake, river, creek, stream, wash, channel or other topographic feature on or over which waters flow at least periodically. Watercourse includes specifically designated areas in which substantial flood damage may occur.

X zone means the area where the flood hazard is less than that in the SFHA. Shaded X zones shown on recent FIRMs (B zones on older FIRMs) designate areas subject to inundation by the flood with a 0.2 percent chance of being equaled or exceeded (the 500-year flood). Unshaded X zones (C zones on older FIRMs) designate areas where the annual exceedance probability of flooding is less than 0.2 percent.

Zone means a geographical area shown on a FIRM that reflects the severity or type of flooding in the area.

Zone A (see definition for A zone)

Zone B, C, and X means areas identified in the community as areas of moderate or minimal hazard from the principal source of flood in the area. However, buildings in these zones could be flooded by severe, concentrated rainfall coupled with inadequate local drainage systems. Flood insurance is available in participating communities but is not required by regulation in these zones. (Zone X is used on new and revised maps in place of Zones B and C.)

Article 3. General Provisions.

Section A. Lands to Which This Ordinance Applies.

This ordinance shall apply to all areas of special flood hazard (SFHAs) within the jurisdiction of Delaware County, Indiana as identified in Article 3, Section B, including any additional areas of special flood hazard annexed by Delaware County, Indiana.

Section B. Basis for Establishing the Areas of Special Flood Hazard

This ordinance’s protection standard is the regulatory flood. The best available regulatory flood data is listed below. Whenever a party disagrees with the best available data, the party submitting the

detailed engineering study needs to replace existing data with better data and submit it to the Indiana Department of Natural Resources for review and approval.

- (1) The regulatory flood elevation, floodway, and fringe limits for the studied SFHAs within the jurisdiction of Delaware County, delineated as an "AE Zone" on the Delaware County, Indiana and Incorporated Areas Flood Insurance Rate Map dated July 4, 2011 shall be determined from the one-percent annual chance flood profiles in the Flood Insurance Study of Delaware County, Indiana and Incorporated Areas and the corresponding Flood Insurance Rate Maps (FIRM) dated July 4, 2011 as well as any subsequent updates, amendments, or revisions, prepared by the Federal Emergency Management Agency with the most recent date. Should the floodway limits not be delineated on the Flood Insurance Rate Map for a studied SFHA designated as an "AE Zone", the limits of the floodway will be according to the best available flood layer as provided by the Indiana Department of Natural Resources.
- (2) The regulatory flood elevation, floodway, and fringe limits for each of the SFHAs within the jurisdiction of Delaware County, delineated as an "A Zone" on the Delaware County, Indiana and Incorporated Areas Flood Insurance Rate Map, dated July 4, 2011, as well as any subsequent updates, amendments, or revisions, prepared by the Federal Emergency Management Agency with the most recent date, shall be according to the best available flood layer provided by the Indiana Department of Natural Resources, provided the upstream drainage area from the subject site is greater than one square mile. Whenever a party disagrees with the best available flood layer data, the party needs to replace existing data with better data that meets current engineering standards. To be considered, this data must be submitted to the Indiana Department of Natural Resources for review and subsequently approved.
- (3) In the absence of a published FEMA map, or absence of identification on a FEMA map, the regulatory flood elevation, floodway, and fringe limits of any watercourse in the community's known flood prone areas shall be according to the best available flood layer as provided by the Indiana Department of Natural Resources, provided the upstream drainage area from the subject site is greater than one square mile.
- (4) Upon issuance of a Letter of Final Determination (LFD), any more restrictive data in the new (not yet effective) mapping/study shall be utilized for permitting and construction (development) purposes, replacing all previously effective less restrictive flood hazard data provided by FEMA.

Section C. Establishment of Floodplain Development Permit.

A Floodplain Development Permit shall be required in conformance with the provisions of this ordinance prior to the commencement of any development activities in areas of special flood hazard.

Section D. Compliance

- (1) No structure shall hereafter be located, extended, converted, or structurally altered within the SFHA without full compliance with the terms of this ordinance and other applicable regulations.
- (2) Where an existing or proposed structure or other development is affected by multiple flood zones, by multiple base flood elevations, or both, the development activity must comply with the provisions of this ordinance applicable to the most restrictive flood zone and the most conservative (highest) base flood elevation affecting any part of the existing or proposed structure; or for other developments, affecting any part of the area of the development.

- (3) No land or stream within the SFHA shall hereafter be altered without full compliance with the terms of this ordinance and other applicable regulations.

Section E. Abrogation and Greater Restrictions.

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

Section F. Discrepancy between Mapped Floodplain and Actual Ground Elevations

- (1) In cases where there is a discrepancy between the mapped floodplain (SFHA) with base flood elevations provided (riverine or lacustrine Zone AE) on the FIRM and the actual ground elevations, the elevation provided on the profiles or table of still water elevations shall govern.
- (2) If the elevation of the site in question is below the base flood elevation, that site shall be included in the SFHA and regulated accordingly.
- (3) If the natural grade elevation of the site in question is at or above the base flood elevation and a LOMA or LOMR-FW is obtained, the floodplain regulations will not be applied provided the LOMA or LOMR-FW is not subsequently superseded or invalidated.

Section G. Interpretation.

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

- (1) Considered as minimum requirements.
- (2) Liberally construed in favor of the governing body.
- (3) Deemed neither to limit nor repeal any other powers granted under state statutes.

Section H. Warning and Disclaimer of Liability.

The degree of flood protection required by this ordinance is considered reasonable for regulatory purposes and is based on available information derived from engineering and scientific methods of study. Larger floods can and will occur on rare occasions. Therefore, this ordinance does not create any liability on the part of Delaware County, the Indiana Department of Natural Resources, or the State of Indiana, for any flood damage that results from reliance on this ordinance or any administrative decision made lawfully thereunder.

Section I. Penalties for Violation.

Failure to obtain a Floodplain Development Permit in the SFHA or failure to comply with the requirements of a Floodplain Development Permit or conditions of a variance shall be deemed to be a violation of this ordinance. All violations shall be considered a common nuisance and be treated as such in accordance with the provisions of the Delaware County Comprehensive Zoning Ordinance and/or the Delaware County Code. All violations shall be punishable by a fine not exceeding \$2,500.

- (1) A separate offense shall be deemed to occur for each day the violation continues to exist.

- (2) The County shall inform the owner that any such violation is considered a willful act to increase flood damages and therefore may cause coverage by a Standard Flood Insurance Policy to be suspended.
- (3) Nothing herein shall prevent the County from taking such other lawful action to prevent or remedy any violations. All costs connected therewith shall accrue to the person or persons responsible.

Article 4. Administration.

Section A. Designation of Administrator.

The Zoning Administrator for Delaware County shall administer and implement the provisions of this ordinance and is herein referred to as the Floodplain Administrator.

Section B. Floodplain Development Permit and Certification Requirements

An application for a floodplain development permit shall be made to the Floodplain Administrator for all development activities located wholly within, partially within, or in contact with an identified special flood hazard area. Such application shall be made by the owner of the property or his/her authorized agent, herein referred to as the applicant, prior to the actual commencement of such construction on a form furnished for that purpose. Such applications shall include, but not be limited to plans drawn to scale showing the nature, location, dimensions, and elevations of the area in question, existing or proposed structures, earthen fill, storage of materials or equipment, drainage facilities, and the location of the foregoing. Specifically, the following information is required:

(1) Application Stage.

- a. A description of the proposed development.
- b. Location of the proposed development sufficient to accurately locate property and structure(s) in relation to existing roads and streams.
- c. A legal description of the property site.
- d. For the reconstruction, rehabilitation, or improvement of an existing structure, or an addition to an existing building, a detailed quote and description of the total work to be completed including but not limited to interior work, exterior work, and labor as well as a certified valuation of the existing (pre-improved or pre-damaged) structure.
- e. A site development plan showing existing and proposed development locations and existing and proposed land grades.
- f. A letter from a licensed professional surveyor or engineer noting that an elevation reference benchmark has been established or confirmed for those projects requiring elevations to be met.
- g. Verification that connection to either a public sewer system or to an approved on-site septic system is available and approved by the respective regulatory agency for proposed structures to be equipped with a restroom, kitchen or other facilities requiring disposal of wastewater.

- h. Plans showing elevation of the top of the planned lowest floor (including basement) of all proposed structures in Zones A, AH, and AE. Elevation should be in NAVD 88.
- i. Plans showing elevation (in NAVD 88) to which any non-residential structure will be floodproofed.
- j. Plans showing location and specifications for flood openings for any proposed structure with enclosed areas below the flood protection grade.
- k. Plans showing materials to be used below the flood protection grade for any proposed structure are flood resistant.
- l. Plans showing how any proposed structure will be anchored to resist flotation or collapse.
- m. Plans showing how any electrical, heating, ventilation, plumbing, air conditioning equipment and other service facilities are designed and/or located. Elevation should be in NAVD 88.
- n. Description of the extent to which any watercourse will be altered or relocated as a result of proposed development. A hydrologic and hydraulic engineering analysis is required, and any watercourse changes submitted to DNR for approval. Once DNR approval is obtained, a FEMA Conditional Letter of Map Revision must be obtained prior to construction. (See Article 4, Section C (8) and Article 4, Section E for additional information.)
- o. Any additional information, as requested by the Floodplain Administrator, which may be necessary to determine the disposition of a proposed development or structure with respect to the requirements of this ordinance.

(2) Construction Stage.

Upon establishment of the lowest floor of an elevated structure or structure constructed on fill, it shall be the duty of the applicant to submit to the Floodplain Administrator an elevation certificate for the building under construction. The Floodplain Administrator shall review the elevation certificate. Any deficiencies detected during the review shall be corrected by the applicant before work is allowed to continue. Failure to submit the survey or failure to make said corrections required hereby shall be cause to issue a stop-work order for the project. Any work undertaken prior to submission of the elevation certification shall be at the applicant's risk.

(3) Finished Construction.

- a. Upon completion of construction of any structure requiring certification of elevation, an elevation certificate which depicts the "as-built" lowest floor elevation and other applicable elevation data is required to be submitted by the applicant to the Floodplain Administrator. The elevation certificate shall be prepared by or under the direct supervision of a registered land surveyor and certified by the same.
- b. Upon completion of construction of an elevated structure constructed on fill, a fill report is required to be submitted to the Floodplain Administrator to verify the required standards were met, including compaction.

- c. Upon completion of construction of a floodproofing measure, a floodproofing certificate is required to be submitted by the applicant to the Floodplain Administrator. The floodproofing certificate shall be prepared by or under the direct supervision of a registered professional engineer or architect and certified by same.

Section C. Duties and Responsibilities of the Floodplain Administrator

The Floodplain Administrator and/or designated staff is hereby authorized and directed to enforce the provisions of this ordinance. The administrator is further authorized to render interpretations of this ordinance, which are consistent with its spirit and purpose.

Duties and Responsibilities of the Floodplain Administrator shall include, but are not limited to:

- (1) Enforce the provisions of this ordinance.
- (2) Evaluate application for permits to develop in special flood hazard areas to assure that the permit requirements of this ordinance have been satisfied.
- (3) Interpret floodplain boundaries and provide flood hazard and flood protection elevation information.
- (4) Issue permits to develop in special flood hazard areas when the provisions of these regulations have been met or refuse to issue the same in the event of noncompliance.
- (5) Advise permittee that additional Federal, State and/or local permits may be required. If specific Federal, State and/or local permits are known, require that copies of such permits be provided and maintained on file with the floodplain development permit.
- (6) Conduct substantial damage determinations to determine whether existing structures, damaged from any source and in special flood hazard areas, must meet the development standards of these regulations.
- (7) For applications to improve structures, including alterations, movement, enlargement, replacement, repair, change of occupancy, additions, rehabilitations, renovations, substantial improvements, repairs of substantial damage, and any other improvement of or work on such buildings and structures, the Floodplain Administrator shall:
 - a. Verify and document the market value of the pre-damaged or pre-improved structure.
 - b. Compare the cost to perform the improvement; or the cost to repair a damaged building to its pre-damaged condition; or, the combined costs of improvements and repair, if applicable, to the market value of the pre-damaged or pre-improved structure. The cost of all work must be included in the project costs, including work that might otherwise be considered routine maintenance. Items/activities that must be included in the cost shall be in keeping with guidance published by FEMA to ensure compliance with the NFIP and to avoid any conflict with future flood insurance claims of policyholders within the community.
 - c. Determine and document whether the proposed work constitutes substantial improvement or repair of substantial damage; the determination requires evaluation of previous permits issued for improvements and repairs as specified in the definition of "substantial improvement" for proposed work to repair damage caused by flood, the determination requires evaluation of

previous permits issued to repair flood-related damage as specified in the definition of substantial damage.

- d. Notify the applicant if it is determined that the work constitutes substantial improvement or repair of substantial damage and that compliance with the applicable general and specific standards in Article 5 of this ordinance are required.
- (8) Notify adjacent communities and the State Floodplain Coordinator prior to any alteration or relocation of a watercourse and submit copies of such notifications to FEMA.
- (9) Ensure that construction authorization has been granted by the Indiana Department of Natural Resources for all development projects subject to Article 5, Section A (1), Section A (3) (a) and Section A (4) of this ordinance. Maintain a record of such authorization (either copy of actual permit/authorization or floodplain analysis/regulatory assessment).
- (10) Verify the upstream drainage area of any proposed development site near any watercourse not identified on a FEMA map to determine if Article 4, Section C (9) is applicable.
- (11) Assure that maintenance is provided within the altered or relocated portion of said watercourse so that the flood-carrying capacity is not diminished.
- (12) Verify and record the actual elevation of the lowest floor (including basement) of all new or substantially improved structures, in accordance with Article 4, Section B.
- (13) Verify and record the actual elevation to which any new or substantially improved structures have been floodproofed in accordance with Article 4, Section B.
- (14) Make on-site inspections of projects in accordance with Article 4, Section D.
- (15) Coordinate with insurance adjusters prior to permitting any proposed work to bring any flood-damaged structure covered by a standard flood insurance policy into compliance (either a substantially damaged structure or a repetitive loss structure) to ensure eligibility for ICC funds.
- (16) Ensure that an approved connection to a public sewer system or an approved on-site septic system is planned for any structures (residential or non-residential) to be equipped with a restroom, kitchen or other facilities requiring disposal of wastewater.
- (17) Provide information, testimony, or other evidence as needed during variance hearings.
- (18) Serve notices of violations, issue stop-work orders, revoke permits and take corrective actions in accordance with Article 4, Section D.
- (19) Maintain for public inspection and furnish upon request local permit documents, damaged structure inventories, substantial damage determinations, regulatory flood data, SFHA maps, Letters of Map Change (LOMC), copies of DNR permits, letters of authorization, and floodplain analysis and regulatory assessments (letters of recommendation), federal permit documents, and "as-built" elevation and floodproofing data for all buildings constructed subject to this ordinance in accordance with Article 4, Section D.
- (20) Coordinate map maintenance activities and associated FEMA follow-up in accordance with Article 4, Section E.

- (21) Utilize and enforce all Letters of Map Change (LOMC) or Physical Map Revisions (PMR) issued by FEMA for the currently effective SFHA maps of the community.
- (22) Request any additional information which may be necessary to determine the disposition of a proposed development or structure with respect to the requirements of this ordinance.

Section D. Administrative Procedures

- (1) Inspections of Work in Progress. As the work pursuant to a permit progresses, the floodplain administrator shall make as many inspections of the work as may be necessary to ensure that the work is being done according to the provisions of the local ordinance and terms of the permit. In exercising this power, the administrator has a right, upon presentation of proper credential, to enter on any premises within the territorial jurisdiction at any reasonable hour for the purposes of inspection or other enforcement action.
- (2) Stop Work Orders.
 - a. Upon notice from the floodplain administrator, work on any building, structure or premises that is being done contrary to the provisions of this ordinance shall immediately cease.
 - b. Such notice shall be in writing and shall be given to the owner of the property, or to his agent, or to the person doing the work, and shall state the conditions under which work may be resumed.
- (3) Revocation of Permits.
 - a. The floodplain administrator may revoke a permit or approval, issued under the provisions of the ordinance, in cases where there has been any false statement or misrepresentation as to the material fact in the application or plans on which the permit or approval was based.
 - b. The floodplain administrator may revoke a permit upon determination by the floodplain administrator that the construction, erection, alteration, repair, moving, demolition, installation, or replacement of the structure for which the permit was issued is in violation of, or not in conformity with, the provisions of this ordinance.
- (4) Floodplain Management Records.
 - a. Regardless of any limitation on the period required for retention of public records, records of actions associated with the administration of this ordinance shall be kept on file and maintained under the direction of the Floodplain Administrator in perpetuity. These records include permit applications, plans, certifications, Flood Insurance Rate Maps; Letter of Map Change; records of issuance of permits and denial of permits; determinations of whether proposed work constitutes substantial improvement or repair of substantial damage; required design certifications and documentation of elevations required by this ordinance; notifications to adjacent communities, FEMA, and the state related to alterations of watercourses; assurances that the flood carrying capacity of altered watercourses will be maintained; documentation related to appeals and variances, including justification for issuance or denial; and records of enforcement actions taken pursuant to this ordinance.
 - b. These records shall be available for public inspection at the Delaware-Muncie Metropolitan Plan Commission Office: 100 W. Main Street, Muncie, IN 47305.

- (5) Periodic Inspection. Once a project is completed, periodic inspections may be conducted by the Floodplain Administrator to ensure compliance. The Floodplain Administrator shall have a right, upon presentation of proper credential, to enter on any premises within the territorial jurisdiction of the department at any reasonable hour for the purposes of inspection or other enforcement action.

Section E. Map Maintenance Activities

To meet NFIP minimum requirements to have flood data reviewed and approved by FEMA, and to ensure that Delaware County flood maps, studies and other data identified in Article 3, Section B accurately represent flooding conditions so appropriate floodplain management criteria are based on current data, the following map maintenance activities are identified:

(1) Requirement to Submit New Technical Data

- a. For all development proposals that impact floodway delineations or base flood elevations, the community shall ensure that technical data reflecting such changes be submitted to FEMA within six months of the date such information becomes available. These development proposals include:
- i. Floodway encroachments that increase or decrease base flood elevations or alter floodway boundaries.
 - ii. Fill sites to be used for the placement of proposed structures where the applicant desires to remove the site from the special flood hazard area.
 - iii. Alteration of watercourses that result in a relocation or elimination of the special flood hazard area, including the placement of culverts; and Subdivision or large-scale development proposals requiring the establishment of base flood elevations.
- b. It is the responsibility of the applicant to have required technical data for a Conditional Letter of Map Revision or Letter of Map Revision and submitted to FEMA. The Indiana Department of Natural Resources will review the submittals as part of a partnership with FEMA. The submittal should be mailed to the Indiana Department of Natural Resources at the address provided on the FEMA form (MT-2) or submitted through the online Letter of Map Change website. Submittal and processing fees for these map revisions shall be the responsibility of the applicant.
- c. The Floodplain Administrator shall require a Conditional Letter of Map Revision prior to the issuance of a floodplain development permit for proposed floodway encroachments that increase the base flood elevation.
- d. Floodplain development permits issued by the Floodplain Administrator shall be conditioned upon the applicant obtaining a Letter of Map Revision from FEMA for any development proposal subject to this section.

(2) Right to Submit New Technical Data

The Floodplain Administrator may request changes to any of the information shown on an effective map that does not impact floodplain or floodway delineations or base flood elevations, such as labeling or planimetric details. Such a submission shall include appropriate supporting documentation made in writing by the President of the Board of County Commissioners of Delaware County and may be submitted to FEMA at any time.

(3) Annexation / Detachment

Upon occurrence, the Floodplain Administrator shall notify FEMA in writing whenever the boundaries of Delaware County 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 the Delaware County, Indiana and Incorporated Areas Flood Insurance Rate Map accurately represent the Delaware County boundaries, include within such notification a copy of a map of Delaware County suitable for reproduction, clearly showing the new corporate limits or the new area for which Delaware County has assumed or relinquished floodplain management regulatory authority.

Article 5. Provisions for Flood Hazard Reduction

Section A. Floodplain Status Standards

(1) Floodways (Riverine)

Located within SFHAs, established in Article 3, Section B, are areas designated as floodways. The floodway is an extremely hazardous area due to the velocity of floodwaters, which carry debris, potential projectiles, and has erosion potential. Under the provisions of the Flood Control Act (IC 14-28-1) a permit for construction in a floodway from the Indiana Department of Natural Resources is required prior to the issuance of a local building permit for any excavation, deposit, construction, or obstruction activity located in the floodway. This includes land preparation activities such as filling, grading, clearing, and paving undertaken before the actual start of construction of the structure. General licenses and exemptions to the requirements of the Flood Control Act (IC 14-28-1 and 312 IAC 10) may apply to qualified additions/improvements to existing lawful residential structures, rural bridges, logjam removals, wetland restoration, utility line crossings, outfall projects, creek rock removal, and prospecting.

- a. If the site is in a regulatory floodway as established in Article 3, Section B, the Floodplain Administrator shall require the applicant to forward the application, along with all pertinent plans and specifications, to the Indiana Department of Natural Resources and apply for approval for construction in a floodway, provided the activity does not qualify for a general license or exemption (IC 14-28-1 or 312 IAC 10).
- b. No action shall be taken by the Floodplain Administrator until approval has been granted by the Indiana Department of Natural Resources for construction in the floodway, or evidence provided by an applicant that the development meets specified criteria to qualify for a general license or exemption to the requirement of the Flood Control Act. The Floodplain Development Permit shall meet the provisions contained in this article.
- c. The Floodplain Development Permit cannot be less restrictive than an approval issued for construction in a floodway issued by the Indiana Department of Natural Resources, or the specified criteria used to qualify for a general license or exemption to the Flood Control Act for a specific site/project. However, a community's more restrictive regulations (if any) shall take precedence.
- d. In floodway areas identified on the FIRM, development shall cause no increase in flood levels during the occurrence of the base flood discharge without first obtaining a Conditional Letter of Map Revision and meeting requirements of Article 4, Section E (1). A Conditional Letter of Map Revision cannot be issued for development that would cause an increase in flood levels affecting a structure and such development should not be permitted.

- e. In floodway areas identified by the Indiana Department of Natural Resources through detailed or approximate studies but not yet identified on the effective FIRM as floodway areas, the total cumulative effect of the proposed development, when combined with all other existing and anticipated development, shall not adversely affect the efficiency of, or unduly restrict the capacity of the floodway. This adverse effect is defined as an increase in the elevation of the regulatory flood of at least fifteen-hundredths (0.15) of a foot as determined by comparing the regulatory flood elevation under the project condition to that under the natural or pre-floodway condition as proven with hydraulic analyses.
- f. For all projects involving channel modifications or fill (including levees) the County shall submit the data and request that the Federal Emergency Management Agency revise the regulatory flood data per mapping standard regulations found at 44 CFR § 65.12.

(2) Fringe (Riverine)

If the site is in the fringe (either identified on the FIRM or identified by the Indiana Department of Natural Resources through detailed or approximate studies and not identified on a FIRM), the Floodplain Administrator may issue the local Floodplain Development Permit provided the provisions contained in this article have been met.

(3) SFHAs without Established Base Flood Elevation and/or Floodways/Fringes (Riverine)

- a. Drainage area upstream of the site is greater than one square mile:

If the site is in an identified floodplain where the limits of the floodway and fringe have not yet been determined, and the drainage area upstream of the site is greater than one square mile, the Floodplain Administrator shall require the applicant to forward the application, along with all pertinent plans and specifications, to the Indiana Department of Natural Resources for review and comment.

No action shall be taken by the Floodplain Administrator until written approval from the Indiana Department of Natural Resources (approval for construction in a floodway, letter of authorization, or evidence of general license qualification) or a floodplain analysis/regulatory assessment citing the one-percent annual chance flood elevation and the recommended Flood Protection Grade has been received from the Indiana Department of Natural Resources.

Once the Floodplain Administrator has received the proper written approval, evidence of general license qualification, or floodplain analysis/regulatory assessment approving the proposed development from the Indiana Department of Natural Resources, a Floodplain Development Permit may be issued, provided the conditions of the Floodplain Development Permit are not less restrictive than the conditions received from the Indiana Department of Natural Resources and the provisions contained in this section have been met.

- b. Drainage area upstream of the site is less than one square mile:

If the site is in an identified floodplain where the limits of the floodway and fringe have not yet been determined and the drainage area upstream of the site is less than one square mile, the Floodplain Administrator shall require the applicant to provide an engineering analysis showing the limits of the floodplain and one-percent annual chance flood elevation for the site.

Upon receipt, the Floodplain Administrator may issue the local Floodplain Development Permit, provided the provisions contained in this article have been met.

(4) SFHAs not Identified on a Map

- a. If a proposed development site is near a waterway with no SFHA identified on a map, the Floodplain Administrator shall verify the drainage area upstream of the site. If the drainage area upstream of the site is verified as being greater than one square mile, the Floodplain Administrator shall require the applicant to forward the application, along with all pertinent plans and specifications, to the Indiana Department of Natural Resources for review and comment.
- b. No action shall be taken by the Floodplain Administrator until written approval from the Indiana Department of Natural Resources (approval for construction in a floodway, letter of authorization, or evidence of general license qualification) or a floodplain analysis/regulatory assessment citing the one-percent annual chance flood elevation and the recommended Flood Protection Grade has been received from the Indiana Department of Natural Resources.
- c. Once the Floodplain Administrator has received the proper written approval, evidence of general license qualification, or floodplain analysis/regulatory assessment approving the proposed development from the Indiana Department of Natural Resources, a Floodplain Development Permit may be issued, provided the conditions of the Floodplain Development Permit are not less restrictive than the conditions received from the Indiana Department of Natural Resources and the provisions contained in this article have been met.

Section B. General Standards

In all areas of special flood hazard, the following provisions are required:

- (1) All new construction, reconstruction or repairs made to a repetitive loss structure, and substantial improvements shall be anchored to prevent flotation, collapse or lateral movement of the structure.
- (2) New construction and substantial improvements shall be constructed with materials and utility equipment resistant to flood damage below the FPG.
- (3) New construction and substantial improvements must incorporate methods and practices that minimize flood damage.
- (4) Electrical, heating, ventilation, plumbing, air conditioning equipment, and other service facilities shall be located at/above the FPG for residential structures. Electrical, heating, ventilation, plumbing, air conditioning equipment, and other service facilities shall be located at/above the FPG or designed so as to prevent water from entering or accumulating within the components below the FPG for non-residential structures. Water and sewer pipes, electrical and telephone lines, submersible pumps, and other waterproofed service facilities may be located below the FPG.
- (5) New and replacement water supply systems shall be designed to minimize or eliminate infiltration of floodwaters into the system.

- (6) New and replacement sanitary sewage systems shall be designed to minimize or eliminate infiltration of floodwaters into the system.
- (7) On-site waste disposal systems shall be located and constructed to avoid impairment to them or contamination from them during flooding.
- (8) Any alteration, repair, reconstruction, or improvements to a structure that is in compliance with the provisions of this ordinance shall meet the requirements of “new construction” as contained in this ordinance.
- (9) Base flood elevation data shall be provided for subdivision proposals and other proposed development (including manufactured home parks and subdivisions), which is greater than fifty (50) lots or five (5) acres, whichever is less.
- (10) Where an existing or proposed structure or other development is affected by multiple flood zones, by multiple base flood elevations, or both, the development activity must comply with the provisions of this ordinance applicable to the most restrictive flood zone and the highest base flood elevation affecting any part of the existing or proposed structure; or for other developments, affecting any part of the area of the development.
- (11) Fill projects that do not involve a structure must be protected against erosion and scour during flooding by vegetative cover, riprap, or bulk heading. If vegetative cover is used, the slopes shall be no steeper than 3’ horizontal to 1’ vertical.
- (12) Non-conversion agreements shall be required for all new or substantially improved elevated structures with an enclosure beneath the elevated floor, accessory structures, and open-sided shelters.
- (13) Construction of new solid waste disposal facilities, hazard waste management facilities, salvage yards, and chemical storage facilities shall not be permitted in areas of special flood hazard.

Section C. Specific Standards

In all areas of special flood hazard where base flood elevation data or flood depths have been provided, as set forth in Article 3, Section B, the following provisions are required:

- (1) **Building Protection Requirement.** In addition to the general standards described in Article 5, Section B, structures to be located in the SFHA shall be protected from flood damage below the FPG. This building protection requirement applies to the following situations:
 - a. Construction or placement of a residential structure.
 - b. Construction or placement of a non-residential structure.
 - c. Addition or improvement made to an existing structure where the cost of the addition or improvement equals or exceeds 50% of the value of the existing structure (excluding the value of the land). An addition and/or improvement project that is continuous in scope or time is considered as one project for permitting purposes.
 - d. Reconstruction or repairs made to a damaged structure where the costs of restoring the structure to its before damaged condition equals or exceeds 50% of the market value of the structure

(excluding the value of the land) before damage occurred (the costs of any proposed additions or improvements beyond restoring the damaged structure to its before damaged condition must be included in the cost).

- e. Installing a manufactured home on a new site or a new manufactured home on an existing site.
- f. Installing a travel trailer or recreational vehicle on a site for more than 180 days.
- g. Reconstruction or repairs made to a repetitive loss structure.
- h. Addition or improvement made to any existing structure with a previous repair, addition or improvement constructed since the community's first floodplain ordinance.

(2) Residential Construction.

- a. New construction or substantial improvement of any residential structures shall meet provisions described in Article 5, Section A and applicable general standards described in Article 5, Section B.
- b. In **Zone A and Zone AE**, new construction or substantial improvement of any residential structure shall have the lowest floor; including basement, at or above the FPG. Should solid foundation perimeter walls be used to elevate a structure, openings sufficient to facilitate the unimpeded movements of floodwaters shall be provided in accordance with the standards of Article 5, Section C (2) (c). Should fill be used to elevate a structure, the standards of Article 5, Section C (2) (d) must be met.
- c. **Fully enclosed areas** formed by foundation and other exterior walls below the flood protection grade shall meet the following requirement:
 - i. Designed to preclude finished living space and designed to allow for the automatic entry and exit of floodwaters to equalize hydrostatic flood forces on exterior walls. Flood openings must be designed and installed in compliance with criteria set out in FEMA Technical Bulletin 1. Engineered flood openings must be designed and certified by a registered design professional (requires supporting engineering certification or make/model specific ICC-ES Report), or meet the following criteria for non-engineered flood openings:
 - A. Provide a minimum of two openings on different sides of an enclosure. If there are multiple enclosed areas, each is required to meet the requirements for enclosures, including the requirement for flood openings in exterior walls (having a total net area of not less than one square inch for every one square foot of enclosed area).
 - B. The bottom of all openings shall be no more than one foot above the higher of the final interior grade (or floor) and the finished exterior grade immediately under each opening.
 - C. If the floor of the enclosure is below the BFE, the openings must be located wholly below the BFE.
 - D. If the floor of the enclosure is at or above the BFE, but below the FPG, the openings must be located wholly below the FPG.

- E. Doors and windows do not qualify as openings.
 - F. Openings may be equipped with screens, louvers, valves or other coverings or devices provided they permit the automatic flow of floodwaters in both directions.
 - G. Openings are to be not less than 3 inches in any direction in the plane of the wall. This requirement applies to the hole in the wall, excluding any device that may be inserted such as typical foundation air vent device.
- ii. The floor of such enclosed area must be at or above grade on at least one side.
- d. A residential structure may be constructed on a **fill** in accordance with the following:
 - i. Fill shall be placed in layers no greater than 1 foot deep before compacting to 95% of the maximum density obtainable with either the Standard or Modified Proctor Test method. The results of the test showing compliance shall be retained in the permit file.
 - ii. Fill shall extend 10 feet beyond the foundation of the structure before sloping below the BFE.
 - iii. Fill shall be protected against erosion and scour during flooding by vegetative cover, riprap, or bulk heading. If vegetative cover is used, the slopes shall be no steeper than 3' horizontal to 1' vertical.
 - iv. Fill shall not adversely affect the flow of surface drainage from or onto neighboring properties.
 - v. Fill shall be composed of clean granular or earthen material.
 - e. A residential structure may be constructed using a **stem wall foundation** (also called chain wall, raised-slab-on-grade, and slab-on-stem-wall-with-fill). Any backfilled stem wall foundation (also called chain wall, raised-slab-on-grade, and slab-on-stem-wall-with-fill) must be backfilled with compacted structural fill, concrete, or gravel that supports the floor slab. No flood openings are required for this type of construction.

(3) Non-Residential Construction.

- a. New construction or substantial improvement of any non-residential structures (excludes accessory structures) shall meet provisions described in Article 5, Section A and applicable general standards described in Article 5, Section B.
- b. In **Zone A and Zone AE**, new construction, or substantial improvement of any commercial, industrial, or non-residential structure (excludes accessory structures) shall either have the lowest floor, including basement, elevated to or above the FPG or be floodproofed to or above the FPG. Should solid foundation perimeter walls be used to elevate a structure, openings sufficient to facilitate the unimpeded movements of floodwaters shall be provided in accordance with the standards of Article 5, Section C (3) (c). Should fill be used to elevate a structure, the standards of Article 5, Section C (3) (d) must be met.
- c. **Fully enclosed areas** formed by foundation and other exterior walls below the flood protection grade shall meet the following requirement:

- i. Designed to preclude finished living space and designed to allow for the automatic entry and exit of floodwaters to equalize hydrostatic flood forces on exterior walls. Flood openings must be designed and installed in compliance with criteria set out in FEMA Technical Bulletin 1. Engineered flood openings must be designed and certified by a registered design professional (requires supporting engineering certification or make/model specific ICC-ES Report), or meet the following criteria for non-engineered flood openings:
 - A. Provide a minimum of two openings on different sides of an enclosure. If more than one enclosed area is present, each must have openings on exterior walls (having a total net area of not less than one square inch for every one square foot of enclosed area).
 - B. The bottom of all openings shall be no more than one foot above the higher of the final interior grade (or floor) and the finished exterior grade immediately under each opening.
 - C. If the floor of the enclosure is below the BFE, the openings must be located wholly below the BFE.
 - D. If the floor of the enclosure is at or above the BFE, but below the FPG, the openings must be located wholly below the FPG.
 - E. Doors and windows do not qualify as openings.
 - F. Openings may be equipped with screens, louvers, valves or other coverings or devices provided they permit the automatic flow of floodwaters in both directions.
 - G. Openings are to be not less than 3 inches in any direction in the plane of the wall. This requirement applies to the hole in the wall, excluding any device that may be inserted such as typical foundation air vent device.
 - ii. The floor of such enclosed area must be at or above grade on at least one side.
- d. A nonresidential structure may be constructed on **fill** in accordance with the following:
- i. Shall be placed in layers no greater than 1 foot deep before compacting to 95% of the maximum density obtainable with either the Standard or Modified Proctor Test method. The results of the test showing compliance shall be retained in the permit file.
 - ii. Shall extend 10 feet beyond the foundation of the structure before sloping below the BFE.
 - iii. Shall be protected against erosion and scour during flooding by vegetative cover, riprap, or bulk heading. If vegetative cover is used, the slopes shall be no steeper than 3' horizontal to 1' vertical.
 - iv. Shall not adversely affect the flow of surface drainage from or onto neighboring properties.
 - v. Shall be composed of clean granular or earthen material.

- e. A nonresidential structure may be **floodproofed** in accordance with the following:
 - i. A Registered Professional Engineer or Architect shall certify that the structure has been designed so that below the FPG, the structure and attendant utility facilities are watertight and capable of resisting the effects of the regulatory flood. The structure design shall take into account flood velocities, duration, rate of rise, hydrostatic pressures, and impacts from debris or ice. Such certification shall be provided to the Floodplain Administrator.
 - ii. Floodproofing measures shall be operable without human intervention and without an outside source of electricity.
- f. A nonresidential structure may be constructed using a **stem wall foundation** (also called chain wall, raised-slab-on-grade, and slab-on-stem-wall-with-fill). Any backfilled stem wall foundation must be backfilled with compacted structural fill, concrete, or gravel that supports the floor slab. No flood openings are required for this type of construction.

(4) Manufactured Homes and Recreational Vehicles.

- a. These requirements apply to all manufactured homes to be placed on a site in the SFHA:
 - i. The manufactured home shall be elevated on a permanent foundation such that the lowest floor shall be at or above the FPG and securely anchored to an adequately anchored foundation system to resist flotation, collapse, and lateral movement.
 - ii. Fully enclosed areas formed by foundation and other exterior walls below the FPG shall be designed to preclude finished living space and designed to allow for the entry and exit of floodwaters to automatically equalize hydrostatic flood forces on exterior walls as required for elevated structures in Article 5, Section C (2) (c).
 - iii. Flexible skirting and rigid skirting not attached to the frame or foundation of a manufactured home are not required to have openings.
- b. Recreational vehicles placed on a site in the SFHA shall either:
 - i. Be on site for less than 180 days and be fully licensed and ready for use on a public highway (defined as being on its wheels or jacking system, is attached to the site only by quick disconnect type utilities and security devices, and has no permanently attached additions), or
 - ii. Meet the requirements for “manufactured homes” as stated earlier in this section.

(5) Accessory Structures

Within SFHAs, new construction or placement of an accessory structure must meet the following standards:

- a. Shall have a floor area of 400 square feet or less.
- b. Use shall be limited to parking of vehicles and limited storage.

- c. Shall not be used for human habitation.
- d. Shall be constructed of flood resistant materials.
- e. Shall be constructed and placed on the lot to offer the minimum resistance to the flow of floodwaters.
- f. Shall be firmly anchored to prevent flotation.
- g. Service facilities such as electrical and heating equipment shall be elevated or floodproofed to or above the FPG.
- h. Shall be designed to allow for the entry and exit of floodwaters to automatically equalize hydrostatic flood forces on exterior walls as required for elevated structures in Article 5, Section C (3) (c).
- i. Shall not have subsequent additions or improvements that would preclude the structure from its continued designation as an accessory structure.

(6) Free-standing Pavilions, Gazebos, Decks, Carports, and Similar Development.

Within SFHAs, new construction or placement of free-standing pavilions, gazebos, decks, carports, and similar development must meet the following standards:

- a. Shall have open sides (having not more than one rigid wall).
- b. Shall be anchored to prevent flotation or lateral movement.
- c. Shall be constructed of flood resistant materials below the FPG.
- d. Any electrical, heating, plumbing and other service facilities shall be located at/above the FPG.
- e. Shall not have subsequent additions or improvements that would preclude the development from its continued designation as a free-standing pavilion, gazebo, carport, or similar open-sided development.

(7) Above Ground Gas or Liquid Storage Tanks.

Within SFHAs, all newly placed aboveground gas or liquid storage tanks shall meet the requirements for a non-residential structure as required in Article 5, Section C (3).

Section D. Standards for Subdivision and Other New Developments

- (1) All subdivision proposals and all other proposed new development shall be consistent with the need to minimize flood damage.
- (2) All subdivision proposals and all other proposed new development 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 and all other proposed new development shall have adequate drainage provided to reduce exposure to flood hazards.
- (4) In all areas of special flood hazard where base flood elevation data are not available, the applicant shall provide a hydrologic and hydraulic engineering analysis that generates base flood elevations for all subdivision proposals and all other proposed new development (including manufactured home parks and subdivisions), which is greater than fifty (50) lots or five (5) acres, whichever is less.
- (5) All subdivision proposals shall minimize development in the SFHA and/or limit density of development permitted in the SFHA.
- (6) All subdivision proposals shall ensure safe access into/out of SFHA for pedestrians and vehicles (especially emergency responders).
- (7) Streets, blocks lots, parks and other public grounds shall be located and laid out in such a manner as to preserve and utilize natural streams and channels. Wherever possible the floodplains shall be included within parks or other public grounds.

Section E. Standards for Critical Facilities.

Construction of new critical facilities shall be, to the extent possible, located outside the limits of the SFHA. Construction of new critical facilities shall be permissible within the SFHA if no feasible alternative site is available. Critical facilities constructed within the SFHA shall have the lowest floor elevated to or above the FPG at the site. Floodproofing and sealing measures must be taken to ensure that toxic substances will not be displaced by or released into floodwaters. Access routes elevated to or above the FPG shall be provided to all critical facilities to the extent possible.

Article 6. Variance Procedures.

Section A. Designation of Variance and Appeals Board.

The Delaware-Muncie Metropolitan Board of Zoning Appeals as established by the City of Muncie and Delaware County shall hear and decide appeals and requests for variances from requirements of this ordinance in accordance with established schedules and procedures.

Section B. Duties of Variance and Appeals Board.

The board shall hear and decide appeals when it is alleged an error in any requirement, decision, or determination is made by the Floodplain Administrator in the enforcement or administration of this ordinance. Any person aggrieved by the decision of the board may appeal such decision in accordance with state law to the Delaware County Circuit or Superior Court within 30 days.

Section C. Variance Procedures.

In acting upon such applications, the board shall consider all technical evaluations, all relevant factors, all standards specified in other sections of this ordinance, and;

- 1) The danger of life and property due to flooding or erosion damage and the danger that materials may be swept onto other lands to the injury of others.
- 2) The susceptibility of the proposed facility and its contents to flood damage and the effect of such damage on the individual owner.
- 3) The importance of the services provided by the proposed facility to the community.
- 4) The necessity of the facility to a waterfront location, where applicable.
- 5) The availability of alternative locations for the proposed use which are not subject to flooding or erosion damage.
- 6) The compatibility of the proposed use with existing and anticipated development,
- 7) The relationship of the proposed use to the comprehensive plan and floodplain management program for that area.
- 8) The safety of access to the property in times of flood for ordinary and emergency vehicles.
- 9) The expected height, velocity, duration, rate of rise, and sediment of transport of the floodwaters at the site.
- 10) The cost of providing governmental services during and after flood conditions including maintenance and repair of public utilities and facilities such as sewer, gas, electrical, water systems, and streets and bridges.

A written report addressing each of the above factors shall be submitted with the applications for a variance.

Section D. Conditions for Variances.

- 1) Variances shall only be issued when there is:
 - a. A showing of good and sufficient cause.
 - b. A determination that failure to grant the variance would result in exceptional hardship as defined in Article 2.
 - c. A determination that the granting of a variance will not result in increased flood heights, additional threats to public safety, extraordinary public expense, create nuisances, cause fraud or victimization of the public, or conflict with existing laws or ordinances.
- 2) No variance for a residential use within a floodway subject to Article 5, Section A (1), Section A (3) (a) or Section A (4) of this ordinance may be granted.
- 3) Any variance granted in a floodway subject to Article 5, Section A (1), Section A (3) (a) or Section A (4) of this ordinance will require a permit from the Indiana Department of Natural Resources. Variances shall not be issued within and designated regulatory floodway if any increase in flood levels during the base flooding discharge would result.

- 4) Variances to the Provisions for Flood Hazard Reduction of Article 5, may be granted only when a new structure is to be located on a lot of one-half acre or less in size, contiguous to and surrounded by lots with existing structures constructed below the flood protection grade.
- 5) Variances shall only be issued upon a determination that the variance is the minimum necessary, considering the flood hazard, to afford relief.
- 6) Variances may be granted for the reconstruction or restoration of any structure individually listed on the National Register of Historic Places or the Indiana State Register of Historic Sites and Structures.
- 7) Any applicant to whom a variance is granted shall be given written notice specifying the difference between the Flood Protection Grade and the elevation to which the lowest floor is to be built and stating that the cost of the flood insurance will be commensurate with the increased risk resulting from the reduced lowest floor elevation (See Article 6, Section E).
- 8) The Floodplain Administrator shall maintain the records of appeal actions and report any variances to the Federal Emergency Management Agency or the Indiana Department of Natural Resources upon request (See Article 6, Section E).
- 9) Variances may be issued for new construction, substantial improvements, and other development necessary for the conduct of a functionally dependent use.
- 10) Upon consideration of the factors listed above and the purposes of this ordinance, the appeal board may attach such conditions to the granting of variances as it deems necessary to further the purposes of this ordinance.

Section E. Variance Notification.

Any applicant to whom a variance is granted that allows the lowest floor of a structure to be built below the flood protection grade shall be given written notice over the signature of a community official that:

- (1) The issuance of a variance to construct a structure below the flood protection grade will result in increased premium rates for flood insurance up; and;
- (2) Such construction below the flood protection grade increases risks to life and property.

The Floodplain Administrator shall maintain a record of all variance actions, including justification for their issuance.

Section F. Historic Structure.

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 an “historic structure” and the variance is the minimum to preserve the historic character and design of the structure.