TITLE 8 — FLOOD DAMAGE PREVENTION

SECTION 1.0 FLOOD DAMAGE PREVENTION: STATUTORY AUTHORIZATION

The Indiana Legislature granted the power to local units of government (Indiana Code IC 36-7-4) to control land use within their jurisdictions in order to accomplish the following.

SECTION 2.0 FLOOD DAMAGE PREVENTION: STATEMENT OF PURPOSE

The purpose of this Ordinance is to guide development in the flood hazard areas in order to reduce the potential for loss of life and property, reduce the potential for health and safety hazards and to reduce the potential for extraordinary public expenditures for flood protection and relief. Under the authority granted to local units of government to control land use within their jurisdiction, which includes taking into account the effects of flooding, the Board of Commissioners of Henry County hereby adopts the following floodplain management regulations in order to accomplish the following:

- A. To prevent unwise Developments from increasing flood or drain hazards to others;
- B. To protect new buildings and major improvements to buildings from flood damage;
- C. To protect human life and health from the hazards of flooding;
- To lessen the burden on the taxpayer for flood control projects, repairs to flood-damaged public facilities and utilities and flood rescue and relief operations;
- E. To maintain property values and a stable tax base by minimizing the potential for creating flood-blighted areas; and
- F. To make federally subsidized flood insurance available for structures and their contents in the County Jurisdictional Area (See Title 1, Section 2.2.) by fulfilling the requirements of the National Flood Insurance Program.

SECTION 3.0 FLOOD DAMAGE PREVENTION: DEFINITIONS

For the purpose of this Ordinance, the following definitions are adopted:

Building See "Structure."

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

- 1. Construction, reconstruction or placement of a building or any addition to a building;
- 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 one hundred eighty (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, channel improvements, etc.;
- 5. Mining, dredging, filling, grading, excavation or drilling operations:
- 6. Construction and/or reconstruction of bridges or culverts:
- 7. Storage of materials; or
- 8. 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 buildings 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 buildings.

Existing Manufactured Home Park or Subdivision

A manufactured home park or Subdivision for which the construction of facilities for servicing the lots on which 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 floodplain management regulations adopted by the County.

Expansion to an **Existing Manufactured** Home Park or Subdivision

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 roads, streets or trafficways and either final site grading or the pouring of concrete pads).

FBFM

Flood Boundary and Floodway Map.

FEMA

Federal Emergency Management Agency.

FHBM

Flood Hazard Boundary Map.

FIRM

Flood Insurance Rate Map.

Flood

A general and temporary condition of partial or complete inundation of normally dry land areas from the overflow, the unusual and rapid accumulation or the runoff of surface waters from any source.

Floodplain

The channel proper and the areas adjoining any wetland, lake or watercourse that have been or hereafter may be covered by the Regulatory Flood. The floodplain includes both the floodway and the floodway fringe districts.

Flood Protection Grade

or "FPG"

The elevation of the Regulatory Flood plus two (2) feet at any given location in the SFHA.

Floodway

The channel of a river or stream and those portions of the floodplains adjoining the channel that are reasonably required to efficiently carry and discharge the peak flood flow of the Regulatory Flood of any river or stream. Floodway Fringe

Those portions of the flood hazard areas lying outside the floodway.

Letter of Map Amendment (LOMA) An amendment to the currently effective FEMA map that establishes that a property is not located in a Special Flood Hazard Area (SFHA). A LOMA is issued only by FEMA.

Letter of Map Revision (LOMR)

An official revision to the currently effective FEMA map. It is issued by FEMA and changes flood zones, delineations and elevations.

Lowest Floor

The lowest of the following:

- 1. The top of the basement floor;
- 2. The top of the garage floor, if the garage is the lowest level of the building;
- 3. The top of the first floor of buildings elevated on pilings or constructed on a crawl space with permanent openings; or
- 4. The top of the floor level of any enclosure below an elevated building where the walls of the enclosure provide any resistance to the flow of flood waters unless:
 - a) The walls are designed to automatically equalize the hydrostatic flood forces on the walls by allowing for the entry and exit of flood waters, by providing a minimum of two (2) openings (in addition to doorways and windows) having a total area of one (1) square foot for every two (2) square feet of enclosed area subject to flooding. The bottom of all such openings shall be no higher than one (1) foot above the enclosed area's grade; or
 - (b) Such enclosed space shall be usable for the parking of vehicles and building access.

Manufactured Home

A structure, transportable in one or more sections, that 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."

New Manufactured Home Park or Subdivision 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 roads, streets or trafficways and either final site grading or the pouring of concrete pads) is completed on or after the effective date of floodplain management regulations adopted by the County.

Recreational Vehicle

A vehicle that is:

- 1. Built on a single chassis;
- 2. Four hundred (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

The flood having a one (1) percent possibility 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. The Regulatory Flood Elevation at any location is as defined in Section 5.0 of this Ordinance. The "Regulatory Flood" is also known by the term "Base Flood."

SFHA or Special Flood Hazard Area

Those lands within the jurisdiction of the Planning Commission that are subject to inundation by the Regulatory Flood. The SFHAs of the County are generally identified as such on the Flood Insurance Rate Maps of the County prepared by FEMA and dated September 4, 1987.

Structure

A building that is principally above ground and 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 and mobile homes to be installed on a site for more than one hundred eighty (180) days.

Substantial Improvement

Any reconstruction, rehabilitation, addition or other improvement of a structure, the cost of which equals or exceeds fifty (50) percent of the market value of the structure before the start of construction of the improvement. This term includes structures that have incurred "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 or any alteration of a "historic structure," provided that the alteration will not preclude the structure's continued designation as a "historic structure."

SECTION 4.0 FLOOD DAMAGE PREVENTION: DUTIES OF THE ZONING ADMINISTRATOR

The Zoning Administrator is appointed to review all Development and Subdivision proposals to ensure compliance with this Ordinance, including, but not limited to:

- A. Ensuring that all development activities within the SFHAs under the jurisdiction of the Planning Commission meet the requirements of this Ordinance;
- B. Providing information and assistance to citizens, upon request, about permit procedures and floodplain construction techniques;
- C. Ensuring that construction authorization has been granted by the Indiana Department of Natural Resources for all Development projects subject to Section 7.0 of this Ordinance and maintaining a record of such authorization (either a copy of the actual permit or a letter of recommendation);
- D. Maintaining a record of the "as-built" elevation of the top of the lowest floor, including basement, of new and/or substantially improved buildings constructed in the SFHA and inspecting before, during and after construction;
- E. Maintaining a record of the engineer's certificate and the "as-built" floodproofed elevation of all buildings subject to Section 8.0 of this Ordinance;

- F. Cooperating with state and federal floodplain management agencies to improve Regulatory Flood and floodway data and to improve the administration of this Ordinance and to submit reports as required for the National Flood Insurance Program;
- G. Maintaining for public inspection and furnishing upon request Regulatory Flood data, SFHA maps, LOMAs, LOMRs, copies of Department of Natural Resources permits and letters of recommendation, federal permit documents and "as-built" elevation and floodproofing data for all buildings constructed subject to this Ordinance; and
- H. Notifying adjacent communities and the State Coordinating Office prior to any alteration or relocation of a watercourse and submitting copies of such notifications to FEMA.

SECTION 5.0 FLOOD DAMAGE PREVENTION: REGULATORY FLOOD ELEVATION

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 them to the Department of Natural Resources for review and approval.

- A. The Regulatory Flood Elevation of the SFHAs of those creeks and rivers that have been studied in detail shall be as delineated on the one hundred (100) year flood profiles in the Flood Insurance Study of the County prepared by FEMA and dated September 4, 1987.
- B. The Regulatory Flood Elevation for each SFHA delineated as an "AH Zone" or "AO Zone" shall be that elevation (or depth) delineated on the FIRM of the County (most recent edition).
- C. The Regulatory Flood Elevation for each of the remaining SFHAs delineated as an "A Zone" on the FIRM of the County (most recent edition) shall be according to the best data available as provided by the Department of Natural Resources.

SECTION 6.0 FLOOD DAMAGE PREVENTION: IMPROVEMENT LOCATION PERMIT

No person, firm, corporation or governmental body not exempted by state law shall commence any Development in an SFHA without first obtaining an Improvement Location Permit from the Planning Commission. The Planning Commission shall not issue an Improvement Location Permit if the proposed Development does not meet the requirements of this Ordinance.

- A. The Application for an Improvement Location Permit shall be accompanied by the following:
 - 1. A description of the proposed Development;
 - 2. Location of the proposed Development, sufficient to accurately locate property and structure in relation to existing roads and streams;
 - 3. A legal description of the property site;
 - 4. A Site Development Plan showing existing and proposed structure locations and existing and proposed land grades; and

- 5. Elevation of the top of the lowest floor, including basement, of all proposed Development. Elevation should be in National Geodetic Vertical Datum of 1929 (NGVD).
- B. Upon receipt of an Application for an Improvement Location Permit, the Zoning Administrator shall determine if the site is located within an identified floodway or within the floodplain where the limits of the floodway have not yet been determined.
 - 1. If the site is in an identified floodway, the Zoning Administrator shall require the Applicant to forward the Application, along with all pertinent plans and specifications, to the Department of Natural Resources and apply for a permit for construction in a floodway.

Under the provisions of Indiana Code IC 14-28-1, a permit from the 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 a floodway. This includes land preparation activities such as filling, grading, clearing, paving, etc., undertaken before the actual start of the construction of the building.

No action shall be taken by the Zoning Administrator until a permit has been issued by the Department of Natural Resources granting approval for construction in the floodway. Once a permit has been issued by the Department of Natural Resources, the Zoning Administrator may issue the local Improvement Location Permit, provided the provisions contained in Sections 7.0 and 8.0 of this Ordinance have been met. The Improvement Location Permit may not be less restrictive than the permit issued by the Department of Natural Resources.

- If the site is located in an identified floodway fringe, then the Zoning Administrator may issue the local Improvement Location Permit, provided the provisions contained in Sections 7.0 and 8.0 of this Ordinance have been met. The key provision is that the lowest floor of any new or substantially improved structure shall be set at or above the FPG.
- 3. If the site is located in an identified floodplain where the limits of the floodway and the floodway fringe have not yet been determined (shown as Zone A on the Flood Insurance Rate Map) and the drainage area upstream of the site is greater than one (1) square mile, the Zoning Administrator shall require the Applicant to forward the Application, along with all pertinent plans and specifications, to the Department of Natural Resources for review and comment.

No action shall be taken by the Zoning Administrator until either a permit for construction in the floodway or a letter of recommendation citing the Regulatory Flood Elevation and the recommended FPG has been received from the Department of Natural Resources.

Once the Zoning Administrator has received the proper permit or letter of recommendation approving the proposed Development, an Improvement Location Permit may be issued, provided the conditions of the Improvement Location Permit are not less restrictive than the conditions received from the Department of Natural Resources and the provisions contained in Sections 7.0 and 8.0 of this Ordinance have been met.

4. If the site is in an identified floodplain where the limits of the floodway and floodway fringe have not yet been determined and the drainage area upstream is less than one (1) square mile, the Zoning Administrator shall require the Applicant to provide an engineering analysis showing the limits of the floodway, floodway fringe and one hundred (100) year elevation for the site.

Upon receipt, the Zoning Administrator may issue the local Improvement Location Permit, provided the provisions contained in Sections 7.0 and 8.0 of this Ordinance have been met.

SECTION 7.0 FLOOD DAMAGE PREVENTION: PREVENTING INCREASED DAMAGES

No Development in the SFHA shall create a damaging or potentially damaging increase in flood heights or velocity or threat to public health or safety.

- A. Within the floodway identified on the FBFM or the FIRM, the following standards shall apply:
 - 1. No Development shall be allowed that acting alone or in combination with existing or future similar works, will cause an increase in the elevation of the Regulatory Flood; and
 - 2. For all projects involving channel modifications or fill, including levees, the Planning Commission shall submit a request to FEMA to revise the Regulatory Flood data.
- B. Within all SFHAs identified as A Zones (no Regulatory Flood Elevation and/or floodway/floodway fringe delineation has been provided) the following standard shall apply:

The total cumulative effect of the proposed Development, when combined with all other existing and anticipated Development, will not increase the Regulatory Flood Elevation more than one-tenth (0.1) of one (1) foot and will not increase flood damages or potential flood damages.

- C. The following public health standards shall apply in all SFHAs:
 - 1. No Development in the SFHA shall include locating or storing chemicals, explosives, buoyant materials, flammable liquids, pollutants or other hazardous or toxic materials below the FPG, unless such materials are stored in a storage tank or floodproofed building constructed according to the requirements of Section 8.0 of this Ordinance.
 - 2. New and replacement sanitary sewer lines and on-site waste disposal systems may be permitted, providing all manholes or other above ground openings located below the FPG are watertight.

SECTION 8.0 FLOOD DAMAGE PREVENTION: PROTECTING BUILDINGS

In addition to the damage prevention requirements of Section 7.0, all buildings to be located in the SFHA shall be protected from flood damage below the FPG.

- A. This building protection requirement applies to the following situations:
 - 1. Construction or placement of any new building having a floor area greater than four hundred (400) square feet;

- 2. Structural alterations made to:
 - (a) An existing (previously unaltered) building, the cost of which equals or exceeds fifty (50) percent of the value of the pre-altered building (excluding the value of the land); or
 - (b) Any previously altered building;
- 3. Installation of a manufactured home on a new site or a new manufactured home on an existing site. This Ordinance does not apply to returning the existing manufactured home to the same site it lawfully occupied before it was removed to avoid flood damage; and
- 4. Installation of a recreational vehicle on a site for more than one hundred eighty (180) days.
- B. This building protection requirement may be met by one of the following methods. The Zoning Administrator shall maintain a record of compliance with these building protection standards as required in Section 4.0 of this Ordinance.
 - 1. A residential or non-residential building may be constructed on a permanent landfill in accordance with the following:
 - (a) The fill shall be placed in layers no greater than one (1) foot deep before compacting to ninety-five (95) percent of the maximum density obtainable with the Standard Proctor Test method:
 - (b) The fill should extend at least ten (10) feet beyond the foundation of the building before sloping below the FPG;
 - (c) The fill shall be protected against erosion and scour during flooding by vegetative cover, rip rap or bulkheading. If vegetative cover is used, the slopes shall be no steeper than three-(3) horizontal to one (1) vertical;
 - (d) The fill shall not adversely affect the flow of surface drainage from or onto neighboring properties; and
 - (e) The top of the lowest floor, including basements, shall be at or above the FPG. (See definition of Lowest Floor in Section 3.0.)
 - 2. A residential or non-residential building may be elevated in accordance with the following:
 - (a) The building improvements shall be elevated on posts, piers, columns, extended walls or other types of similar foundation, provided:
 - (1) Walls of any enclosure below the elevated floor shall be designed to automatically equalize hydrostatic flood forces on the walls by allowing for the entry and exit of flood waters through providing a minimum of two (2) openings (in addition to doorways and windows) having a total area of one (1) square foot for every two (2) square feet of enclosed area subject to flooding. The bottom of all such openings shall be no higher than one (1) foot above grade; and
 - (2) Any enclosure below the elevated floor is used for storage of vehicles and building access;

- (b) The foundation and supporting members shall be anchored and aligned in relation to flood flows and adjoining structures so as to minimize exposure to known hydrodynamic forces such as current, waves, ice and floating debris; and
- (c) All areas below the FPG shall be constructed of materials resistant to flood damage. The lowest floor, including basement, and all electrical, heating, ventilating, plumbing and air conditioning equipment and utility meters shall be located at or above the FPG. Water and sewer pipes, electrical and telephone lines, submersible pumps and other waterproofed service facilities may be located below the FPG.
- 3. Manufactured homes and recreational vehicles to be installed or substantially improved on a site for more than one hundred eighty (180) days must meet one (1) of the following anchoring requirements:
 - (a) 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. This requirement applies to all manufactured homes to be placed on a site:
 - (1) Outside a manufactured home park or Subdivision;
 - (2) In a new manufactured home park or Subdivision;
 - (3) In an expansion to an existing manufactured home park or Subdivision; or
 - (4) In an existing manufactured home park or Subdivision on which a manufactured home has incurred "substantial damage" as a result of a flood; or
 - (b) The manufactured home shall be elevated so that the lowest floor of the manufactured home chassis is supported by reinforced piers or other foundation elements that are no less than thirty-six (36) inches in height above grade and be securely anchored to an adequately anchored foundation system to resist flotation, collapse and lateral movement. This requirement applies to all manufactured homes to be placed on a site in an existing manufactured home park or Subdivision that has not been substantially damaged by a flood.
- 4. Recreational vehicles placed on a site shall either:
 - (a) Be on the site for less than one hundred eighty (180) consecutive days;
 - (b) Be fully licensed and ready for highway use (defined as being on its wheels or jacking system, attached to the site only by quick disconnect type utilities and security devices and with no permanently attached additions); or
 - (c) Meet the requirements for "manufactured homes" in Paragraph 3 of this section.
- 5. A non-residential building may be floodproofed to the FPG (in lieu of elevating) if done in accordance with the following:
 - (a) A certified engineer licensed by the State of Indiana shall certify that the building 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 building design shall take into account flood velocities, duration, rate of rise, hydrostatic pressures and impacts from debris or ice; and

(b) Floodproofing measures shall be operable without human intervention and without an outside source of electricity.

SECTION 9.0 FLOOD DAMAGE PREVENTION: OTHER DEVELOPMENT REQUIREMENTS

- A. The Planning Commission shall review all proposed Subdivisions to determine whether the Subdivision lies in an SFHA as defined elsewhere by this Ordinance. If the Planning Commission finds the Subdivision to be so located, the Planning Commission shall forward plans and materials to the Indiana Department of Natural Resources for review and comment. The Planning Commission shall require appropriate changes and modifications in order to assure that:
 - 1. The plans are consistent with the need to minimize flood damage;
 - 2. All public utilities and facilities, such as sewer, gas, electrical and water systems are located and constructed to minimize or eliminate flood damage;
 - 3.. Adequate drainage is provided so as to reduce exposure to flood hazards; and
 - 4. On-site waste disposal systems, if provided, will be so located and designed to avoid impairment of them or contamination from them during the occurrence of the Regulatory Flood.
- B. Developers shall record the Regulatory Flood Elevation on all Subdivision plats containing lands identified elsewhere by this Ordinance as within a flood hazard area prior to submitting the plats for approval by the Planning Commission.
- C. All Owners of manufactured home parks or Subdivisions located within the SFHA identified as Zone A on the community's FHMB or FIRM shall develop an evacuation plan for those lots located in Zone A and have it filed and approved by the appropriate community emergency management authorities.

SECTION 10.0 FLOOD DAMAGE PREVENTION: VARIANCES

- A. The Board of Zoning Appeals may consider issuing a variance to the terms and provisions of this Ordinance, provided the Applicant demonstrates that:
 - 1. There exists a good and sufficient cause for the requested variance;
 - 2. The strict application of the terms of this Ordinance will constitute an exceptional hardship to the Applicant; and
 - 3. The granting of the requested variance will not increase flood heights, create additional threats to public safety, cause additional public expense, create nuisances, cause fraud or victimization of the public or conflict with existing laws or ordinances.
- B. The Board of Zoning Appeals may issue a variance to the terms and provisions of this Ordinance, subject to the following standards and conditions:

- 1. No variance or exception for residential use within a floodway subject to Section 7.0 A or B may be granted:
- 2. Any variance or exception granted in a floodway subject to Section 7.0 A or B will require a permit from the Department of Natural Resources;
- 3. Variances or exceptions to the Building Protection Standards of Section 8.0 may be granted only when a new structure is to be located on a lot of one-half (0.5) acre or less in size, contiguous to and surrounded by lots with existing structures constructed below the FPG;
- 4. A variance or exception may be granted for the reconstruction or restoration of any structure individually listed on the Register of Historic Places or the Indiana State Survey of Historic, Archaeological and Cultural Sites, Structures, Districts and Objects:
- 5. All variances shall give the minimum relief necessary and be such that the maximum practical flood protection will be given to the proposed construction; and
- 6. The Board of Zoning Appeals shall issue a written notice to the recipient of a variance or exception that the proposed construction will be subject to increased risks to life and property and could require payment of excessive flood insurance premiums.

SECTION 11.0 FLOOD DAMAGE PROTECTION: DISCLOSURE 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 the County, 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 12.0 FLOOD DAMAGE PREVENTION: VIOLATIONS

Failure to obtain an Improvement Location Permit in the SFHA or failure to comply with the requirements of a permit or conditions of a variance shall be deemed 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 Zoning Ordinance for Henry County, Indiana.

- A. A separate offense shall be deemed to occur for each day the violation continues to exist.
- B. The Planning Commission 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.
- C. 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.

SECTION 13.0 FLOOD DAMAGE PREVENTION: ABROGATION AND GREATER RESTRICTIONS

This Ordinance repeals and replaces other ordinances adopted by the County to fulfill the requirements of the National Flood Insurance Program. However, this Ordinance does not repeal the original resolution or ordinance adopted to achieve eligibility in the Program. Nor does this Ordinance repeal, abrogate or impair any existing easements, covenants or deed restrictions. Where this Ordinance and other easements, covenants or deed restrictions conflict or overlap, whichever imposes the more stringent restrictions shall take precedence. In addition, the County shall assure that all National Flood Insurance Program regulations and laws (3 10 Indiana Administrative Code IAC 6-1-1, Indiana Code IC 14-28-1 and Indiana Code IC 14-28-3) are met.

SECTION 14.0 FLOOD DAMAGE PREVENTION: SEPARABILITY

The provisions and sections of this Ordinance shall be deemed separable and the invalidity of any portion of this Ordinance shall not affect the validity of the remainder.

SECTION 15.0 FLOOD DAMAGE PREVENTION: EFFECTIVE DATE

This Ordinance shall take effect upon its adoption by the Board of Commissioners of Henry County.