To Amend Chapters 10.04, 17.04, 19.08, 19.16, 19.20, 20.04, 20.05, 20.06, 20.15, 20.19 and 20.21, and Add Chapter 9.12, of the Bloomington Municipal Code, Concerning Flood Hazard Areas and Special Conservancy Districts

BE IT HEREBY ORDAINED BY THE COMMON COUNCIL OF THE CITY OF BLOOMINGTON, MONROE COUNTY, INDIANA, THAT:

SECTION I. Section 20.04.01.00 of the Bloomington Municipal Code is hereby amended by adding the following definitions, to be inserted in alphabetical order:

FLOOD OR FLOODWATER: The water of any lake or water-course which is above the banks or outside the channel and banks.

FLOOD HAZARD AREA: Any area subject to innundation by the Regulatory Flood including the floodway, floodway fringe, and floodplain districts.

FLOOD PROOFED BUILDING: A building designed to exclude floodwaters from the interior of that building or otherwise preclude the possibility of flood damage. All such floodproofing shall be adequate to withstand the flood depths, pressures, velocities, impact and uplift forces and other factors associated with the regulatory flood, as certified by a registered professional engineer or an architect licensed to practice in the State of Indiana.

FLOOD PROTECTION ELEVATION: The elevation of the lowest floor including the basement floor of a structure that is not floodproofed or the water surface elevation if floodproofed as provided herein.

FLOODWAY: That portion of the flood hazard area required to store, convey, and discharge the regulatory flood. The identification of these areas may be made by Natural Resources, The Soil Conservation Service, The Federal Insurance Administration, The Corps of Engineers, The US Geological Survey or other reliable sources, provided, however, all such identifications shall be made in compliance with the current rules, procedures and policies of Natural Resources. Natural Resources exercises primary jurisdiction in the Floodway under the provisions of IC 13-2-22. The floodway shall include the floodway as shown on the Flood Insurance Rate Map prepared under the National Flood Insurance Program by the U.S. Department of Housing and Urban Development.

MOBILE HOME TIE DOWNS SCHEDULE A: Sufficient anchorage to resist flotation, collapse or lateral movement of any mobile home. At a minimum, such anchorage shall consist of (1) over-the-top ties provided at each of the four corners of the mobile home, with two additional ties per side at intermediate locations, except mobile homes less than 50 feet long require only one additional tie per side; and (2) frame ties provided at each corner of the home with five additional ties per side at intermediate points, except mobile homes less than 50 feet long require only four additional ties per side. All components of the anchoring system shall be capable of carrying a force of 4,800 pounds. Any additions to the mobile home shall be similarly anchored.

NATURAL RESOURCES: The Indiana Natural Resources Commission.

REGULATORY FLOOD: That flood having a peak discharge which can be expected to be equaled or exceeded on the average of once in a one hundred year period, as calculated by a method and procedure which is acceptable to and approved by Natural Resources. The regulatory flood shall include the "100 year flood" as shown on the Flood Insurance Rate Map prepared under the National Flood Insurance Program by the U.S. Department of Housing and Urban Development.

REGULATORY FLOOD PROFILE: A longitudinal profile along the thread of a stream showing the maximum water surface elevation attained by the regulatory flood.

STORAGE CAPACITY OF THE FLOOD HAZARD AREA: The volume of space above an area that can be occupied by the waters of the regulatory flood.

SUBSTANTIAL MODIFICATION: Any alteration, repair, enlargement or extension of an existing building. Such substantial modification is considered to occur when the first alteration of any wall, ceiling, floor or other structural element of the building commences. This term does not, however, include either (1) any project for improvement of a structure to comply with existing health, sanitary or safety code specifications or (2) any alteration of a structure listed on the National Register of Historic Places or the Indiana State Survey of Historic, Architectural, Archeological and Cultural Sites, Structures, Districts and Objects.

SECTION II. - Chapter 20.05 of the Bloomington Municipal Code is hereby amended by renumbering Sections 20.05.07.00 through 20.05.10.00 to become Sections 20.05.08.00 through 20.05.11.00 and by adding new Sections 20.05.07.00 through 20.05.07.04 to read as follows:

20.05.07.00 FLOOD HAZARD DISTRICTS

The following districts are established in order to apply special regulations in areas subject to flooding in order to reduce the hazard of flood to life and property. The districts established by these regulations are superimposed over the underlying zoning districts, and the regulations of this section shall be construed as supplementary to the underlying zoning regulations. In the event of conflict, the most restrictive combination of such regulations shall govern.

- 20.05.07.01

 UF, Urban Floodway District. This district is intended to regulate the use of floodway areas within the developed part of the Bloomington planning jurisdiction so as to prevent obstruction of the floodway and resulting increase in flood stage, with minimum disruption of established patterns of land use and activity.
- 20.05.07.02

 RF, Rural Floodway District. This district is intended to regulate the use of floodway areas outside of the developed part of the Bloomington Planning Jurisdiction at the time of adoption of this ordinance so as to prevent obstruction of the floodway and reduction of flood water storage capacity of the district, and the resultant increase in flood stage, and to minimize the hazard of damage and loss due to flooding in such areas.
- 20.05.07.03 FF, Floodway Fringe District. This district is intended to regulate the use of flood hazard areas outside of the floodway so as to minimize the hazard of flood in the course of normal development of such areas.
- 20.05.07.04 FP, Flood Plain District. This district is intended to regulate the use of flood hazard areas where a determination of a floodway has not been made, so as to require review of specific proposals to insure that flood hazards are minimized and flood stages are not increased.

SECTION III. Section 20.05.08.02 (formerly Section 20.05.07.02) of the Bloomington Municipal Code is hereby amended by deleting "Special Conservancy Zone" from the list of new zones and by adding to the list the following:

SC Special Conservancy District UF Urban Floodway District RF Rural Floodway District FF Floodway Fringe District FP Flood Plain District

SECTION IV. Section 20.06.03.00 of the Bloomington Municipal Code is hereby amended to read as follows:

20.06.03.00 NON-COMPLYING STRUCTURES

> Any structure which does not comply with one or more of the applicable district height, bulk, and density regulations of off-street parking requirements or with the regulations of the Flood Hazard Districts either on date of enactment of this ordinance or as a result of any subsequent amendments to this chapter.

SECTION V. Chapter 20.06 of the Bloomington Municipal Code is hereby amended by adding Sections 20.06.06.00 through 20.06.06.04 to read as follows:

20.06.06.00 FLOOD HAZARD AREAS

> Any structure or use located in a flood hazard district shall be governed by the general regulations of this chapter to the extent that non-conformance or noncompliance is related to requirements other than those governing flood hazard areas. To the extent that non-conformance or non-compliance is related to the regulations of the flood hazard districts, modifications are governed by the following provisions.

20.06.06.01 Enlargement and Substantial Modifications in Floodway: In any Floodway District, no non-complying structure or non-conforming use may be expanded or enlarged nor can any structure undergo substantial modification without a permit for construction in a floodway from Natural Resources.

20.06.06.02 Substantial Modification in Floodway Fringe: In a Floodway Fringe (FF) District a non-complying structure may undergo substantial modification provided such modification is on a one-time-only basis and further provided that such modification does not increase the value of the building by more than forty (40) percent of its pre-improvement market value excluding the value of land unless such structure is brought into compliance.

Substantial Modification in Flood Plain: A non-complying 20.06.06.03 structure in a Flood Plain (FP) District may undergo substantial modification on a one-time-only basis, provided the procedures set forth in this ordinance with respect to new construction in a Flood Plain (FP) District are followed and further provided such modification does not increase the value of the structure, excluding the value of land, by more than forty (40) per cent of its pre-improvement market value, unless such structure is brought into compliance.

Replacing Damaged Buildings: Any non-conforming use or non-complying structure in the Flood Hazard Districts which is damaged may be restored to its original dimensions and conditions, provided the damage does not reduce the value of the buildings, excluding the value of the land, by more than forty (40) percent of its predamage value.

20.06.06.04

SECTION VI. Chapter 20.15 of the Bloomington Municipal Code is hereby amended to read as follows:

20.15 FLOOD HAZARD AREAS

20.15.01.00 INTENT OF REGULATIONS

The Urban Floodway, Rural Floodway, Floodway Fringe, and Flood Plain Districts are superimposed over the underlying zoning districts, and the regulations of this section shall be construed as supplementary to the underlying zoning regulations. In the event of conflict, the most restrictive combination of such regulations shall govern.

20.15.02.00 WARNING AND DISCLAIMER OF LIABILITY

It is not represented herein that flooding will be limited to those areas designated as Flood Hazard Areas or to the conditions of the regulatory flood. It is hereby asserted that there is no liability on the part of the City of Bloomington or the State of Indiana or any employee thereof for any flood damage that may occur as a result of reliance upon, or conformance with these regulations.

20.15.03.00 DISTRICTS

For the purpose of these regulations, the following districts are established:

UF Urban Floodway District RF Rural Floodway District FF Floodway Fringe District FP Flood Plain District

20.15.04.00 DISTRICT BOUNDARIES

- 20.15.04.01 Zoning Maps: Boundaries of the districts listed above shall be delineated on the map designated as the official zoning maps of the City of Bloomington and its planning jurisdiction.
- Location: The locations of the district boundaries are based upon the Regulatory Flood Profile, which shall be the 100 year recurrence interval flood as determined by the Flood Insurance Study by the U.S. Department of Housing and Urban Development where applicable. The profiles developed in said study are hereby made a part of this ordinance, including any future amendments. Where Federal Insurance Administration flood profiles are not available, the required flood protection elevation shall be determined by the city engineer from other available data.
- 20.15.04.03

 Disputed Boundaries: Any person contesting the location of the district boundaries may request interpretation by the Plan Commission or its agent. The elevation of the Regulatory Flood Profile for the point in question shall be the governing factor in locating the boundary on the land.
- 20.15.04.04 Structures Located on Boundary Lines: Where a district boundary divides a structure, these regulations shall apply to any portion of the structure that is at or below the elevation of the regulatory flood.

20.15.05.00 PERMITTED USES IN FLOOD HAZARD DISTRICTS

Only the following uses, where permitted and as regulated in the underlying district, shall be permitted upon issuance of applicable local permits.

20.15.05.01 UF, Urban Floodway; RF, Rural Floodway; and FP, Flood Plain Districts:

- A. Agricultural open space uses.
- B. Forestry, wildlife areas, nature preserves.
- C. Parks and recreational open space uses.
- D. Open areas used to meet yard, density, and open space requirements.
- E. Other open space uses accessory to commercial, industrial, or residential use, such as parking or loading facilities, provided that storage is limited to motor vehicles, provided that there is no change in the pre-existing grade of the site through fill or any construction that would impede flood flow.

20.15.05.02 FF, Floodway Fringe District:

- A. Any non-residential use provided that the flood protection elevation for any building or structure shall be at least two (2) feet above the elevation of the regulatory flood.
- B. Residential structures provided that the lowest floor, including basement floor, is elevated to or above the elevation of the regulatory flood.
- C. Mobile homes if located on pads of concrete or compacted fill at or above the elevation of the regulatory flood and provided with ground anchors meeting Mobile Home Tie Downs Schedule A. Access at or above the elevation of the regulatory flood shall be required.
- D. Onsite waste disposal systems if so located as to avoid impairment of them or contamination from them during the occurence of the regulatory flood.
- E. Filling or depositing of materials.

20.15.06.00 CONDITIONAL USES IN FLOOD HAZARD DISTRICTS

Only the following uses, where permitted and as regulated in the underlying district, shall be permitted by the Plan Commission only after a permit or letter of recommendation has been granted by Natural Resources and all conditions and specifications of these regulations have been met. Any structures or additions to structures shall have flood protection elevations at least two (2) feet above the regulatory flood elevation and shall be constructed so as to minimize obstruction to flood flow. Onsite waste disposal systems shall be so located as to avoid impairment of them or contamination from them during the occurence of the regulatory flood.

20.15.06.01 RF, Rural Floodway District:

- A. Water management and use facilities.
- B. Transportation facilities, bridges, pipe lines and utility facilities.
- C. Temporary or seasonal flood plain occupancy such as carnivals, fairs, camps, not involving permanent structures.
- D. Water-related urban uses, such as wastewater treatment facilities, storm sewers, electric generating and transmission facilities, and water treatment facilities.
- E. Recreation equipment and structures, other than buildings, provided that any structure shall be floodproofed.

20.15.06.02 UF, Urban Floodway District:

- A. Any conditional use permitted in the RF district.
- B. Filling or Depositing of materials.
- C. Floodproofed Non-Residential structures.
- D. Any other flood tolerant or open space uses, such as storage of materials not subject to flood damage.

20.15.06.03 FP, Floodplain District:

- A. Any conditional use permitted in the RF or the UF District.
- B. Residential Structures.
- C. Mobile homes if located on pads of concrete or compacted fill at or above the elevation of the regulatory flood and provided with ground anchors meeting Mobile Home Tie Downs Schedule A. Access at or above the elevation of the regulatory flood shall be required.

20.15.07.00 WATERCOURSE ALTERNATIONS

No alteration shall be made to any watercourse in any Flood Hazard Area as shown on the zoning map or any area otherwise subject to jurisdiction of Natural Resources unless the flood conveyance capacity of said watercourse is maintained and adjacent local government units are notified. Copies of such notice shall be submitted to the Federal Insurance Administration.

SECTION VII. Section 20.05.05.02 of the Bloomington Municipal Code is hereby amended to read as follows:

20.05.05.02

SC-Special Conservancy District: The Special Conservancy District is created to protect the public health and to reduce the financial burdens which may be imposed on the community, its governmental units and its individuals as a result of improper use of lands having physical impediments or limitations for development or use. Special Conservancy districts shall be designated SC for sink holes, intermittent streams, steep slopes, wetlands or any other area having an unusual physical problem which makes the area unsuitable for development.

SECTION VIII. Title 20 of the Bloomington Municipal Code is hereby amended by adding Chapter 20.12 to read as follows:

20.12 SPECIAL CONSERVANCY

20.12.01.00 PURPOSE AND INTENT

The purpose of these regulations is to require special assurances of feasibility and acceptable impact for areas that pose environmental constraints to use or development other than Flood Hazard areas. The SC district is superimposed over the underlying zoning district, and the regulations of this section shall be construed as supplementary to the underlying zoning regulations. In the event of conflict, the most restrictive combination of such regulations shall govern.

20.12.02.00 ASSURANCE REQUIRED

In any SC district, before any permit is issued for grading, construction, use or occupancy, before any approval is rendered by any person, Board or Commission authorized to administer the zoning, subdivision, building, or site plan review regulations of the City of Bloomington, or before any site plan is approved, the applicant shall submit sufficient assurance, with supporting data and calculations as may be required, that any and all of the environmental constraints are successfully overcome by the proposal, without hazard to life or property or adverse effects upon other persons or property.

- 20.12.02.01 Certification: Such assurance shall be certified by a Registered Professional Engineer or by an Architect licensed to practice in the State of Indiana.
- 20.12.02.02 Special Regulations: Such assurance shall include compliance with the special regulations outlined below.
 - A. <u>Karst Topography</u>: In areas zoned SC due to known sinkholes, caves, or other areas of recognizable hazard:
 - Assurance shall be provided that any proposal for construction or use, including paved areas, is adequately protected against collapse. Soil borings, engineering details of sinkhole caps, and any other relevant information may be required.

- 2. Storm water drainage discharged into sinkholes shall not be increased over its pre-existing rate according to standards as established by the city engineer. Wherever possible drainage from paved areas or structures shall not be directed to sinkholes.
- B. <u>Steep Slopes</u>: In areas zoned SC due to severe slopes:
 - All proposals shall include existing and proposed contours at not more than two-foot contour intervals, certified by a Surveyor or a Registered Professional Engineer.
 - 2. Grading shall be designed so as to conform as closely as possible to the natural contours and to minimize interference with existing vegetation and ground cover.
 - 3. On any open area with a slope steeper than 3:1 (33 1/3%) slopes, ground covers and retaining walls shall be demonstrated as sufficient to withstand slippage, collapse, and surface erosion.
 - 4. Any structure or paved area shall be designed with footings that ensure against the possibility of slippage or collapse of supporting soils.
 - 5. Plans shall include measures required to ensure that soil erosion will not occur as the result of disturbance of existing conditions in the course of construction. These measures shall be explicitly detailed on the plans. Failure to implement such measures shall be cause for immediate stoppage of construction.
 - 6. Plans shall include measures, such as drainage structures, rip-rap, and vegetation to ensure against erosion after construction is complete.
 - 7. The plans shall show compliance with the provisions of Section 20.16.06.00 of the Zoning Code.
- C. <u>Intermittent Streams</u>: In areas zoned SC due to water related hazard or as required for significant storm drainage conveyance, according to standards established by the city Engineer:
 - The applicant shall demonstrate, with supporting computations, that the waterway will be able to accommodate storm water flows according to standards established by the city engineer.
 - 2. Any proposed structures shall be situated at an elevation above the water surface profile of the stream under storm conditions established by the city engineer, or by Natural Resources where applicable.
 - Wherever possible, drainage flows shall not be diverted from pre-existing channels.

SECTION IX. Section 20.19.08.00 of the Bloomington Municipal Code is hereby amended by adding a new sub-section 20.19.08.03 to read as follows:

20.19.08.03

Variance to the terms of the regulations for Flood Hazard areas may be granted only upon the issuance of a permit or a letter of recommendation from Natural Resources. Any such variance shall give the minimum relief necessary, and be such that the maximum practical flood protection will be realized. The Board shall issue a written notice to the recipient of such a variance that the proposed construction will be subject to increased risks to life and property and could require payment of excessive flood insurance premiums.

SECTION X. Section 20.21.03.01 of the Bloomington Municipal Code is hereby amended to read as follows:

20.21.03.01

No building, structure, <u>or mobile home</u> shall be erected, reconstructed, enlarged, <u>or moved until</u> the zoning and the site plan has been verified by the enforcement officer.

SECTION XI. Section 20.21.03.06 of the Bloomington Municipal Code is hereby amended to read as follows:

20.21.03.06

A record of all certificates and permits shall be kept on file in the office of the enforcement officer, and a copy shall be forwarded on request to any person having proprietary or tenancy interest in the building or land affected. Such records shall include all plans for new construction, additions, or other site improvements in any Flood Hazard Area, the elevations and flood protection elevations related thereto.

SECTION XII. Section 19.08.030 of the Bloomington Municipal Code is hereby amended to read as follows:

19.08.030

Conditions of Land-Drainage and Subsoil. No land shall be subdivided for residential use if such land is considered by the commission to be unsuitable for such use by reason of flooding or improper drainage, objectionable earth and rock formation topography or any other feature harmful to the health and safety of possible residents and the community as a whole. The Plan Commission shall review all proposed subdivisions to determine whether the subdivision lies in a flood hazard area as defined in Section 20.04.01.00 of this code. If the Plan Commission finds the subdivision to be so located, it shall forward pertinent plans and materials to the Indiana Department of Natural Resources for review and comment. The Plan Commission may require appropriate changes and modifications in order to assure that it is consistent with the need to minimize flood damages; all public utilities and facilities, such as sewer, gas, electrical and water systems are located and constructed to minimize or eliminate flood damage; adequate drainage is provided so as to reduce exposure to flood hazards; and that on-site waste disposal systems, if provided, will be so located as to avoid impairment of them or contamination from them during the occurence of the regulatory flood.

SECTION XIII. Section 19.16.030(2) of the Bloomington Municipal Code is hereby amended by adding a new sub-section (H) to read as follows:

(H) if containing lands identified on the zoning maps as flood hazard areas, the elevation of the regulatory flood and the area subject to innundation thereby.

SECTION XIV. Section 19.20.010 of the Bloomington Municipal Code is hereby amended by adding a new sub-section (19) to read as follows:

(19) if containing lands identified in the zoning code as flood hazard areas, the elevation of the regulatory flood.

SECTION XV. Section 17.04.080 of the Bloomington Municipal Code is hereby amended to read as follows:

17.04.080

Permit -- Required -- Exceptions. It is unlawful to construct, enlarge, alter, remove or demolish, or change the occupancy of a building from one use group to another requiring greater strength, exit or sanitary provisions; or, to change to a prohibited use; or, to install or alter any equipment for which provision is made or the installation of which is regulated by the code; or toplace a mobile home on a site, without first filing an application with the city engineer, in writing, and obtaining the required permit thereof; except that ordinary repairs as defined in Section 17.04.040 which do not involve any violation of the code shall be exempt from this provision.

SECTION XVI. Section 17.04.140 of the Bloomington Municipal Code ishereby amended to read as follows:

17.04,140

Conformity of buildings with rules and regulations. All new buildings, additions to existing buildings, and all construction, reconstruction, alteration and repair of buildings or structures in the city shall conform to the requirements of the building rules and regulations incorporated by reference into this code as provided in this chapter, from and after the taking effect of this code, and shall apply to all buildings or construction commenced after the effective date of this code.

The term "building rules and regulations," whenever so used in this chapter means the building rules and regulations so incorporated by reference into this code by this chapter.

The city engineer shall review all applications for permits for new construction, additions to existing structures, or placement of mobile homes and prefabricated structures, to ascertain whether the proposed construction lies in a flood hazard area as established on the zoning map. If the proposed construction lies in such an area, the city engineer may require such modifications to the design and materials of the proposed construction and the utility services as the city engineer may deem appropriate to prevent flotation, collapse, or lateral movement of the structure and minimize potential future flood damages. Further, the city engineer shall require that all other necessary permits are first obtained from those governmental agencies from which approval is required by Federal or State Law.

SECTION XVII. Title 9 of the Bloomington Municipal Code is hereby amended by adding a new chapter 9.12 to read as follows:

9.12 STANDARDS FOR WATER UTILITY CONSTRUCTION IN FLOOD HAZARD AREAS

9.12.010

All new or replacement water mains, valves and other appurtenances constructed or reconstructed in a Flood Hazard Area as established on the zoning maps of the City of Bloomington shall be designed and constructed as to minimize or eliminate infiltration of floodwaters into these systems and discharges from these systems into floodwaters.

SECTION XVIII. Chapter 10.04 of the Bloomington Municipal Code is hereby amended by adding a new section 10.04.045 to read as follows:

10.04.045

All new or replacement sewers, manholes and other appurtenances constructed or reconstructed in a Flood Hazard Area as established on the zoning map of the City of Bloomington shall be designed and constructed to minimize or eliminate infiltration of floodwater into these systems and discharges from these systems into floodwaters.

SECTION XIX. The districts established by this ordinance and the boundaries thereof shall be as shown on the Bloomington Zoning Maps dated June 7, 1978. Said Maps incorporate the zoning maps adopted June 22, 1973, together with all subsequent amendments thereto, and as amended from time to time shall be the official zoning maps of the City of Bloomington. Said Maps, dated June 7, 1978, and all explanatory matter thereon, are hereby adopted and made a part of this ordinance.

SECTION XX. Severability. If any section, sentence or provision of this ordinance, or the application thereof to any person or circumstance shall be declared invalid, such invalidity shall not affect any of the other sections, sentences, provisions, or applications of this ordinance which can be given effect without the invalid provision or application, and to this end the provisions of this chapter are declared to be severable.

SECTION XXI. THIS ORDINANCE shall be in full force and effect from and after its passage by the Common Council of the City of Bloomington, Indiana, this $\frac{7}{}$ day of $\frac{1}{}$ June $\frac{1}{}$, 1978.

> John/F// Richardson, President Bloom/ington Common Council

ATTEST:

Connors. Deputy City Clerk

Presented by me to the Mayor of the City of Bloomington, Indiana, this 8 day of $\frac{1}{1000}$, 1977, at the hour of $\frac{3}{1000}$ o'clock $\frac{1}{1000}$ m.

SIGNED AND APPROVED by me upon the 13th day of 1978, at the hour of 4:30 o'clock m.

Francis X, McCloskey, Mayor City of Bloomington

SYNOPSIS

Ordinance No. 78-31 To Amend the Zoning Maps of June 22, 1973

The Zoning Ordinance classified all land within the planning jurisdiction into residential, business, and manufacturing zones. The boundaries for these zones are established by the Plan Commission and Common Council and within each district only certain uses are permitted.

This ordinance, if approved, will establish new overlay zones for flood hazard areas, and establish boundaries for such zones, to include the Floodway District (FW), Floodway Fringe District (FF), and Floodplain District (FP); and will enact supplementary changes in the Building Code, Subdivision Code, and Zoning Code as they relate to flood hazard areas.