ORDINANCE NO. 1993-19

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### DELAWARE COUNTY CODE

Chapter 66

#### STORM DRAINAGE AND SEDIMENT CONTROL ORDINANCE

### 4 - 66 - 1. PURPOSE

WHEREAS, there is a compelling necessity for the control of storm water runoff and the protection of soils within Delaware County, Indiana; and WHEREAS, to insure, promote, and protect the orderly development of land within Delaware County, Indiana; and WHEREAS, the Board of County Commissioners of Delaware County, Indiana, is granted the authority to prepare a uniform plan for storm drainage and sediment control within the unincorporated area of Delaware County, Indiana.

NOW, THEREFORE, BE IT ORDAINED by the Board of Commissioners of Delaware County, Indiana, under the authority of the Indiana Home Rule statutes, and Indiana Code 36-9-1 et. seq. and all acts of the General Asembly of the State of Indiana amendatory thereto, as follows:

The purpose of this ordinance is to protect the safety, health and general welfare of the citizens of Delaware County, Indiana by requiring compliance with standards and practices which result in proper storm water drainage and sediment control in the event of land alterations.

#### 4 - 66 - 2. JURISDICTION

The provisions of this ordinance shall be applicable throughout the unincorporated area of Delaware County, Indiana.

#### 4 - 66 - 3. LAND ALTERATIONS

Any land alteration must be accomplished in conformity with the drainage requirements of this ordinance. Where any apparent conflict exists between drainage requirements of this ordinance and similar requirements of the Delaware County Drainage Board or any state or federal agency which has jurisdiction over the work involved, the most stringent requirements shall be applicable. Except for the foregoing, compliance with any other applicable provision of law, ordinance or regulation shall not excuse noncompliance with this ordinance.

### 4 - 66 - 4. DEFINITIONS

- A. BUILDING COMMISSIONER: As used herein, "Building Commissioner" shall mean the Building Commissioner of Delaware County, Indiana.
- B. COUNTY COMMISSIONERS: As used herein, "Commissioners" and "County Commissioners" shall mean the Board of Commissioners of Delaware County, Indiana.
- C. COUNTY ENGINEER: As used herein, "County Engineer" shall mean the County Engineer of Delaware County, Indiana.
- D. DRAINAGE BOARD: As used herein, "Drainage Board" shall mean the Delaware County Drainage Board.
- E. DRAINAGE FACILITIES: As used herein, "drainage facilities" shall mean all ditches, channels, conduits, retention-detention systems, tiles, swales, sewers, and other natural or artificial means of draining storm water from land.
- F. DRAINAGE REQUIREMENTS: As used herein, "drainage requirements" shall mean:
  - (1) Minimum drainage standards established by the provisions of this ordinance.
  - (2) Regulations promulgated by the County Commissioners.
  - (3) Obligations and requirements relating to drainage established under the Subdivision Control Ordinance of Delaware County, Indiana.
  - (4) Requirements stated under the Delaware County Comprehensive Zoning Ordinance and the Flood Plain Management Ordinance for Delaware County, Indiana.
  - (5) Obligations and requirements relating to drainage established under the Drainage Board of Delaware County, Indiana.
  - (6) Conditions relating to drainage attached to a grant of appeal by the Delaware Muncie Metropolitan Board of Zoning Appeals.
- G. LAND ALTERATIONS: As used herein, "land alterations" shall mean any action taken relative to land which either:
  - (1) Changes the contour; or
  - (2) Increases the runoff rate: or

- (3) Changes the elevation; or
- (4) Changes the rate at which water is absorbed; or
- (5) Changes the drainage pattern; or
- (6) Creates or changes a drainage facility; or
- (7) Involves construction, enlargement or location of any building on a permanent foundation as regulated herein; or
- (8) Involves a subdivision of land as regulated in the Delaware County Subdivision Ordinance or a planned unit development or a mobile home park as regulated in the Delaware County Comprehensive Zoning Ordinance; or
- (9) Creates an impoundment.

Land alteration includes terracing, grading, excavating, constructing earthwork, draining, installing drainage tile, filling and paving which impacts drainage to or from any public right-of-way and/or public facility.

- H. MAINTENANCE: As used herein, "maintenance" shall mean cleaning out, removing obstructions from, spraying and making minor repairs of a drainage facility so it will perform the function for which it was designed and constructed.
- I. MINOR LANDSCAPING: As used herein, "Minor Landscaping" shall mean the planting and tilling of gardens, flower beds, shrubs, trees, and similar uses and a fill less than one (1) foot in depth, and placed on natural terrain with a slope flatter than ten (10) percent, not intended to support structures, which does not exceed fifty (50) cubic yards per acre and does not obstruct drainage.
- J. PLAN COMMISSION: As used herein, "Plan Commission" shall mean the Delaware-Muncie Metropolitan Plan Commission.
- K. SURVEYOR: As used herein, "Surveyor" or "County Surveyor" shall mean the Delaware County Surveyor.

### 4 - 66 - 5. ADMINISTRATION

- A. DRAINAGE PERMIT EXCLUSION: The following actions shall not be considered a land alteration for the purpose of this ordinance nor shall a drainage permit be required:
  - (1) Excavation of cemetery graves;
  - (2) Refuse disposal sites where storm drainage is

controlled by other regulations;

- (3) Excavation for wells, excavation and backfills for poles, conduits and wires of utility companies;
- (4) Exploratory excavation or soil testing under the direction and control of professional engineers, soil engineers, geologists, civil engineers, architects or land surveyors, which are backfilled and which are restored to original contours;
- (5) Ordinary cultivation of agricultural land including tilling, terracing, construction of minor open ditches and crop irrigation;
- (6) The planting and tilling of gardens, flower beds, shrubs, trees and other common uses and minor landscaping of land appurtenant to residences;
- (7) Fill and grading of former basement site after the demolition of a structure, to conform to adjacent terrain;
- (8) Fill of small holes caused by erosion, settling of earth or the removal of such materials as dead trees, posts or concrete;
- (9) A fill less than one (1) foot in depth, and placed on natural terrain with a slope flatter than ten (10) percent, not intended to support structures, which does not exceed fifty (50) cubic yards per acre and does not obstruct drainage;
- (10) Maintenance of drainage facilities;
- (11) Installation of septic systems, when proper permit has been obtained:
- (12) Construction of a driveway, when a proper permit has been obtained:
- (13) Installation of individual building sewers, when a proper tap permit has been obtained.
- (14) Installation and/or construction of a 1 or 2 family dwelling provided the provisions of SECTION 4-66-7 are met and proper permits are obtained.
- B. DRAINAGE PERMITS APPLICATION: No person, partnership or corporation shall undertake or accomplish any land alteration withough having in force a written drainage permit obtained from the Delaware County Engineer. The drainage permit must be obtained before any work is initiated with

exception of testing to determine procedures or the materials. In order to obtain a drainage permit, the applicant for same must be the person or entity that will in fact be responsible for accomplishing the land alteration for which the permit was issued. Applications for a drainage permit shall be filed in the Office of the Delaware County Engineer on forms prescribed by the County Commissioners. Within seven (7) working days from the date of filing for a drainage permit, the County Engineer shall either issue the permit or forward a written statement to the applicant indicating cause for nonissuance. The statement shall set forth all actions, information, and/or plan amendments necessary to allow issuance of a drainage permit. Approvals shall not be unduly withheld. A drainage permit shall be issued by the County Engineer if:

- (1) The application and the drainage plan with supplemental information required by SECTION 4-66-6 have been properly prepared and submitted and reflect compliance with the General Drainage Standards for Delaware County, Indiana.
- (2) A certificate of sufficiency of plan and a certificate of obligation to observe have been filed by a registered professional engineer, land surveyor or architect engaged in storm drainage design;
- (3) If required by the Engineer or another entity authorized to establish or enforce drainage requirements, a bond has been posted pursuant to SECTION 4-66-9:
- (4) If required by the Engineer or another entity authorized to establish or enforce drainage requirements, a covenant has been executed pursuant to SECTION 4-66-9:
- (5) If required by the Engineer or another entity authorized to establish or enforce drainage requirements, an easement has been dedicated pursuant to SECTION 4-66-9;
- (6) The applicable fee has been paid.

No drainage facility intended for public dedication shall be constructed until a drainage permit has been obtained from the Delaware County Engineer. A drainage facility or system intended to be dedicated to the public, in whole or in part, must be accepted by Delaware County by action of the Delaware County Drainage Board or the Delaware County Commissioners, as applicable, and no such drainage facility or system shall be accepted unless it is found to be in conformance with this Ordinance.

### 4 - 66 - 6. PROFESSIONALLY PREPARED AND CERTIFIED DRAINAGE PLANS

A drainage plan fulfilling the requirements of this SECTION shall be submitted to the Office of the County Engineer for approval before a drainage permit can be obtained to accomplish a land alteration. The drainage plan must be submitted in duplicate, and shall indicate in a precise manner the work to be accomplished, and said plans shall in all respects be consistent with the drainage plan submitted. One (1) copy of the drainage plan will remain on file in the County Engineer's Office. The following information must be submitted for approval:

- A. CONSTRUCTION FEATURES: The drainage plan shall demonstrate and describe surface and subsurface drainage and include the following:
  - (1) The drainage plan shall be drawn to scale, preferably one (1) inch per fifty (50) feet, and an arrow indicating north shall appear on each page. Existing land contours shall be shown, with one-foot contours for land with a slope flatter than ten (10) percent, two-foot contours for slopes equal to or greater than ten (10) percent but flatter than twenty (20) percent, and five-feet contours for slopes equal to or greater than twenty (20) percent. A bench mark, which is easily accessible and locatable, shall be shown. The bench mark shall be determined by USGS datum.
  - (2) A map which indicates the location and vicinity of the proposed land alteration shall be included in the drainage plan.
  - (3) The drainage plan shall show the locations of all existing and proposed drainage facilities. Storm drains and manholes and other structures shall be in the plans by dimensions from traverse located markers or road center property lines, However, for areas where physical features are not available, coordinates of manholes and bearings of storm drains shall be based on the State of Indiana's acceptable horizontal and coordinate system or other applicable, the drainage plan vertical datum. If of flow, elevation of should show the direction inverts, gradient, size and capacity of existing and proposed storm drains. When using storm drains, the capacity shall be indicated. Profiles of the on-site construction shall be provided which show existing and proposed ground information and any proposed piping and structures.
  - (4) Plan and profile information shall be provided

any off-site construction. The plan shall be shown at the upper portion of the drawing. The plan, generally, shall be drawn to scale of one (1) inch fifty (50) feet. equals The plan shall appropriate right-of-way and easement limits. profile shall be shown under the plan and shall extend a sufficient distance downstream of the outlet to allow any pertinent information concerning the outfall channel to be shown. The storm drain and inlet profile shall generally be drawn on a scale of one (1) inch equals fifty (50) feet horizontal, (1) inch equals five (5) feet vertical. Where a storm drain is located in an existing or proposed pavement or shoulder, the center line grade of the road shall be shown. Where a storm drain is located outside pavement or shoulder, the existing ground over the storm drain with proposed grading shall be shown. the storm drain is to be constructed on fill, profile of the undisturbed earth, at drain location, shall be shown.

- B. DESIGN CALCULATIONS: Design calculations are required as part of the drainage plan and shall specifically include:
  - (1) Estimation of existing and proposed storm water runoff conditions, with a drainage area map for the site and tributary area, shall be calculated utilizing storm conditions contained in the General Drainage Standards for Delaware County, Indiana. The drainage area map shall indicate contours at two-foot (2') intervals and limits of the 100-year flood (USGS quad maps, or the Delaware County Watershed maps, or other contour maps where applicable). Weighted runoff coefficient computations and time of concentration computations indicating overland flow time and flow time in the swale, gutter, pipe or channel shall be indicated.
  - (2) Closed conduit and open channel design computations shall include the size of pipe or channel cross section, pipe or channel invert's slope in percent, roughness coefficient, flowing velocities in feet per second, and design capacity in cubic feet per second.
  - (3) Head loss computations in manholes and junction chambers.
  - (4) Hydraulic gradient computations, wherever applicable.
  - (5) Erosion control methods.

Such design calculations shall conform with the standards of SECTIONS 4-66-16 and 4-66-17 of this ordinance and all regulations promulgated thereunder. The County Engineer shall be empowered to require additional information to be included in a drainage plan as is necessary to evaluate and determine the adequacy of the proposed drainage facility.

C. CERTIFICATES: All drainage plans submitted under this SECTION to the County Engineer's Office for approval must be certified by a registered professional engineer, land surveyor or architect engaged in storm drainage design, under whose supervision the plans were prepared. The certificate shall be in the following form:

### CERTIFICATE OF SUFFICIENCY OF PLAN

Permit Number	
Address where land alteration is occurring	
Plan Date	
I hereby certify that to the best of my knowledge and belief:	
(1) The drainage plan for this project is in compliance	
with drainage requirements (as set forth in the Storm	
Drainage and Sediment Control Ordinance for Delaware	
County, Indiana) pertaining to this class of work.	
(2) The calculations, designs, reproducible drawings,	
masters and original ideas reproduced in this drainage	
plan are under my dominion and control and they were	
prepared by me and my employees.	
SignatureDate	
Typed/Printed Name	
(SEAL)	
Business Address	
Surveyor Engineer Architect	
Indiana Registration Number	

All drainage plans submitted under this SECTION to the County Engineer's Office must include a Certificate of Obligation to Observe by a registered professional engineer, land surveyor or architect engaged in storm drainage design. The certificate shall be in the following form:

# CERTIFICATE OF OBLIGATION TO OBSERVE

	Permit Number
Address where land alteration is or	ccurring
Plan Date	
I will perform periodic observation	ons of this project during
construction to determine that	such land alteration is in
accordance with both the applicat	ole drainage requirements
and the drainage plan for this	project submitted for a
drainage permit to the Office of	f the Engineer of Delaware
County, Indiana.	
Signature	Date
Typed/Printed Name	
Phone	
(SEAL)	
Business Address	
Surveyor Engineer	Architect
Indiana Registration Number	

Within ten (10) days after the completion of a land alteration for which a drainage permit was required and relative to which a certified plan was required to be filed pursuant to this SECTION, a registered professional engineer, land surveyor or architect engaged in storm drainage design, shall execute and file with the County Engineer's Office a Certificate of Completion and Compliance. Such certificate shall be in the following form:

CERTIFICATE OF COMPLETION AND COMPLIANCE
Address of premises on which land alteration was accomplished
Inspection Date(s)
Permit Number
Relative to plans prepared by
On Date
I hereby certify that:
(1) I am familiar with drainage requirements applicable to such land alteration (as set forth in the Storm Drainage and Sediment Control Ordinance of Delaware County, Indiana); and
(2) I have personally observed the land alteration accomplished pursuant to the above-referenced drainage permit; and
(3) To the best of my knowledge, information and belief such land alteration has been performed and completed in conformity with all such drainage requirements, except
SignatureDate
Type/Printed NamePhone
(SEAL)
Business Address
Surveyor Engineer Architect

Indiana Registration Number .

## 4 - 66 - 7. REGULATED DRAIN CLEARANCE - 1 & 2 FAMILY DWELLINGS

A. PROCESS: Prior to any site work in connection with the installation, construction, enlargement or location of a one-family dwelling, two-family dwelling or accessory structure appurtenant to either a one- or two-family dwelling, the owner and/or developer shall obtain clearance from the Delaware County Surveyor's Office that no work shall encroach upon any regulated drain easement.

The following information must be submitted in order for the Surveyor's Office to establish such regulated drain clearance:

- (1) The legal description and the street address for the property;
- (2) The dimensions and borders of the parcel;
- (3) The name and address of the owner;
- (4) An arrow indicating north;
- (5) Location of all existing and proposed improvements, structures and paved areas on the site.

No permits shall be issued in connection with the installation, construction, enlargement or location of a 1-family dwelling, 2-family dwelling or accessory structures appurtenant thereto prior to obtaining the regulated drain clearance described herein.

Regulated drain clearance shall be indicated on subdivisions for which a drainage plan has been approved as set forth in this Ordinance. Such clearance shall be shown on the subdivision plat in the form of drainage easements and special notes as deemed necessary. Regulated drain clearance shall not be required as a precondition for obtaining permits in the instance of a 1- or 2- family dwelling constructed in a subdivision for which a plat and a drainage plan have been approved provided the owner and/or developer of such dwellings comply with the specifications and information found on the approved plat and drainage plan.

The County Surveyor may require the submission of plans or other information in order to establish regulated drain clearance.

### 4 - 66 - 8. PERMIT DURATION

If the land alteration for which the permit has been issued has not commenced within two (2) years from the date of its issuance, the permit shall expire by operation of law and no longer be of any force or effect; provided, however, the County Commissioners may, upon the recommendation of the County Engineer, extend the validity of the permit for an additional period of time.

### 4 - 66 - 9. BONDS, COVENANTS AND EASEMENTS

Board of County Commissioners, upon the of the County Engineer, may as a Α. BONDS: The recommendation prerequisite to the issuance of a drainage permit, require the posting of a performance bond or other surety. principle or other surety shall be the owner of the affected land, the developer, or any other party, parties or entity the County Commissioners believe necessary or helpful. Such bond shall name Delaware County as a party who can enforce the obligations thereunder, and shall be in an amount established by the County Commissioners as adequate to provide surety for the satisfactory completion of improvements required by the drainage permit. In the instance of platting, such bond may be a part of the total bonding required by the County Commissioners.

In instances where the County Commissioners have required a performance bond pursuant to this SECTION, the Commissioners may, as an alternative to the posting of such bond, accept other appropriate security, such as a properly conditioned irrevocable letter of credit, which meets the same objectives as the performance bond described in this SECTION, subject to the approval of any other department or agency whose interests are protected by the same bonding requirement.

B. COVENANTS: Where the County Engineer shall determine that such is necessary in order to achieve satisfactory present and future drainage of the parcel of land for which a drainage permit is sought and the area surrounding the parcel, the Board of County Commissioners may, as a prerequisite to the issuance of a drainage permit, require the execution of covenants and/or easements running in form to Delaware County, Indiana by the owner or owners of such parcel. As a minimum in such cases, the County Commissioners shall require that the following covenant be executed by the owner or owners of such land which will be included in a recorded plat:

"It shall be the responsibility of the owner of any lot or parcel of land within the area of this plat to comply at all times with the provisions of the drainage plan as approved for this plat by the Board of Commissioners of Delaware County, Indiana and/or the Drainage Board of Delaware County, Indiana and the requirements of all drainage permits for this plat issued by the Delaware County Engineer's Office."

C. EASEMENTS: The Board of County Commissioners may, upon recommendation from the County Engineer and as a prerequisite to issuance of a drainage permit, require the dedication of easements to Delaware County and to owners of other affected lands by the owner of the parcel of land, relative to which application for a drainage permit has been made, where such is necessary to achieve satisfactory present and future drainage of the parcel and the area surrounding the parcel.

#### 4 - 66 - 10. NONCONFORMING SITES

A development existing prior to the enactment of this Ordinance must be brought into full compliance with this Ordinance if any of the following activities occur:

- A. EXPANSION OF FLOOR AREA: The gross floor area of a development is expanded by more than ten (10) percent, or more than four thousand (4,000) square feet, whichever is less. Repeated expansions of a development, constructed over a period of time commencing with the effective date of this Ordinance, shall be combined in determining whether this threshold has been reached.
- B. INTENSIFICATION AND CHANGE OF USE: The use of a development is intensified or the use of a development is changed, resulting in an increase in storm water runoff.
- C. CHANGE IN SITE DESIGN: Any activity that requires the submission of a development plan and an amended development plan is submitted which involves more than ten (10) percent of the land area of the parcel.

### 4 - 66 - 11. INVESTIGATIONS AND INSPECTIONS

power to make investigations and inspections of land alterations shall be vested in the County Surveyor, the County Engineer and the County Building Commissioner and authorized representatives. Investigation and inspection of land alterations may be made at any time by going upon, around about the premises on which the land alteration has occurred. Such investigation and inspection may be made either before, during or after the land alteration is completed and it may be made for the purposes, among others, of determining whether the land alteration meets drainage requirements and ascertaining whether the land alteration has been accomplished in a manner consistent with plans and specifications or a certificate filed pursuant to SECTION 4-66-6. Efforts to afford an opportunity for investigation and inspection of the land alteration shall be made by persons working on or having control of the land alteration, including making available a copy of plans and specifications submitted to obtain a drainage permit.

### 4 - 66 - 12. ENFORCEMENT

- A. FEES FOR PERMITS OBTAINED AFTER COMMENCEMENT OF WORK: If work for which a drainage permit is required by this ordinance is commenced by the permit applicant without compliance with the provisions of SECTION 4-66-5, the permit fee shall be double the applicable amount stated in SECTION 4-66-14, and if work for which a permit is required is completed or is substantially completed by the permit applicant without compliance with the provisions of SECTION 4-66-5, the permit shall be ten (10) times the applicable amount stated in SECTION 4-66-14; provided, however, that the maximum fee incurred under this SECTION shall be three hundred (300) dollars plus the amount of the normal fee for the permit. This sanction shall in no way limit the operation of penalties provided elsewhere in this ordinance.
- B. PERMIT REVOCATION: The Board of County Commissioners may revoke the drainage permit where the application, plans, supporting documents, or other evidence required by this ordinance reflects either:
  - (1) A false statement or misrepresentation as to material fact; or
  - (2) Lack of compliance with drainage requirements of this ordinance; or
  - (3) Failure to post bond, execute covenants or dedicate easements as required by the County Commissioners or other applicable entity pursuant to this ordinance.

This sanction shall in no way limit the operation of penalties provided elsewhere in this ordinance.

- C. STOP-WORK ORDER: Wherever the County Surveyor, the County Engineer or the County Building Commissioner or their authorized representatives discover the existence of any of the circumstances listed below, they are empowered to issue an order requiring the suspension of the land alteration. A stop-work order shall be issued if:
  - (1) Land alteration is proceeding in an unsafe manner;
  - (2) Land alteration is occurring in violation of a drainage requirement and in such manner that if land alteration is allowed to proceed, there is a probability that it will be substantially difficult to correct the violation; or
  - alteration for which a drainage permit is (3) Land required is proceeding without a drainage permit being in force. In such an instance the stop-work order shall indicate that the effect of the order terminates when the required drainage permit is obtained.

This sanction shall in no way limit the operation of penalties provided elsewhere in this ordinance.

- CIVIL ACTION: Delaware County may initiate a civil action in a court of competent jurisdiction to restrain any person, partnership or corporation accomplishing a land alteration from violating a drainage requirement or plans and specifications filed in order to obtain a drainage permit. Delaware County may also initiate a civil action in a court of competent jurisdiction to restrain any person, partnership or corporation which owns land from allowing a drainage requirement or plans and specifications filed in order to obtain a drainage permit to be violated when a land alteration is accomplished. The purposes for which injunctive relief may be sought shall include, but not limited to:
  - (1) Enforcing the provisions of a stop-work order issued pursuant to this ordinance; or
  - (2) Preventing the accomplishment of a land alteration in violation of a drainage requirement; or
  - (3) Requiring accomplishment of a land alteration in accordance with the drainage requirements, and, if a permit has been obtained, plans and specifications filed therewith.

This sanction shall in no way limit the operation of

penalties provided elsewhere in this ordinance.

- E. GENERAL PENALTY: Any person, partnership or corporation violating the substantive or procedural provisions of this ordinance, any minimum standard found in SECTION 4-66-16 and SECTION 4-66-17 of this ordinance, any regulation promulgated pursuant to this ordinance, or any other drainage requirement as defined in SECTION 4-66-4 shall be guilty of a misdemeanor and may be subject to a fine in any sum not exceeding two thousand five hundred dollars (\$2,500.00). This penalty shall in no way limit the operation of special penalties for specific provisions of this ordinance, nor shall such special penalties in any way limit the operation of this general penalty.
- ENFORCEMENT OF COVENANTS: Any person who violates a covenant required under SECTION 4-66-9, and/or the owner of any parcel of land who permits such a violation upon land owned by him or her, may be notified in writing by the County Surveyor, the County Engineer or by the County Building Commissioner, that a violation exists, and shall be given a reasonable period of time in which to correct such The notice shall specify the nature of violation. reasonable clarity. Ιf violation with the person responsible for the violation of a covenant required under SECTION 4-66-9, or the owner of the land upon which such violation exists, fails to correct the violation in a reasonable time in accordance with the requirements of the notice described above, Delaware County shall have authority to correct the violation at its expense and to place a lien upon the real property whereupon the violation was so corrected for the recovery of any and all expenses incurred by the County for effecting such correction.

#### 4 - 66 - 13. VARIANCES AND DEVIATIONS FROM PLAN

- A. PROCEDURE: The Board of Commissioners of Delaware County, Indiana shall have the power to modify or waive any minimum drainage standard found in SECTIONS 4-66-16 and 4-66-17 of this ordinance. The Commissioners may grant such modification or waiver if an applicant for a drainage permit makes a substantial showing:
  - (1) That a minimum drainage standard regulation is infeasible or unreasonably burdensome; and
  - (2) The alternate plan submitted by the applicant will achieve the same objective and purpose as compliance with minimum drainage standards and regulations.

The request for a variance together with supporting information shall be made in writing to the County Engineer

who shall present the request to the County Commissioners at the first regularly scheduled Commissioners' meeting following the filing of the request. The County Commissioners shall make a decision on the request for a variance within thirty (30) days after the request was filed with the County Engineer.

- B. DEVIATIONS FROM PLAN: Any significant deviation or change in the detailed plans and specifications after the granting of a drainage permit shall be approved by the County Commissioners. The request for a deviation or change shall be made prior to commencing any land alteration affected by the deviation or change and shall be made in the same manner as for a variance.
- C. APPEALS: A decision by the County Commissioners under this SECTION shall be subject to review by certiorari.

## 4 - 66 - 14. FEES

A. AMOUNT: The following fee schedule shall apply for all land alterations accomplished pursuant to this ordinance:

CATEGORY OF LAND ALTERATION

PERMIT FEE

(1) Land alteration, in or out of a subdivision, which is in conjunction with the construction, enlargement or location of a 1-family or 2-family dwelling, or an accessory building appurtenant thereto for which regulated drain clearance is required.

NONE

(2) Land alteration in conjunction with the platting of a subdivision, the development of a planned unit development or a mobile home park. The permit fee is to be paid when the drainage permit is issued based on the previously submitted, approved drainage plans.

\$ 10.00 per acre with a \$ 10.00 MINIMUM & \$100.00

MUMIXAM

(3) Land alterations which are neither in conjunction with the conditions set forth in item 1 above nor in conjunction with the conditions set forth in item 2 above.

\$ 20.00 per acre with a \$ 10.00 MINIMUM &

\$100.00 MAXIMUM

B. EXEMPTION FOR GOVERNMENTAL UNITS: Drainage permits shall be obtained for land alteration activity accomplished by or for a governmental unit and inspections as specified in this ordinance shall be allowed. Fees shall be required as specified except for the following:

- (1) Land alteration activity for which a fee cannot be charged by the municipality because of federal or state law, or
- (2) Land alteration activity accomplished by an employee or contractor of Delaware County in the course of governmental duties.
- C. PAYMENT: Drainage permit fees shall be collected by the Engineer's Office and shall be deposited in the County Highway Funds for Delaware County, Indiana.

### 4 - 66 - 15. PROCEDURE FOR PROMULGATION OF REGULATIONS

- A. AUTHORIZATION: The Board of Commissioners of Delaware County, Indiana, shall adopt, amend or repeal regulations which more specifically deal with the subject matter of the standards found in SECTIONS 4-66-16 and 4-66-17. The provisions of such regulations shall be consistent with the standards of SECTIONS 4-66-16 and 4-66-17. Any conflict between these standards and the regulations shall be reconciled in favor of the standards.
- B. NOTICE OF HEARING: Before any regulation is adopted, amended or repealed by the Board of County Commissioners as authorized by this SECTION, the Commissioners shall cause a notice to be published at least ten (10) days prior to the date set for a public hearing. The notice shall include a statement of the time and place of the hearing, a reference to the general subject matter of the proposed regulations and reference to the fact that a copy of the proposed regulations is on file at the County Engineer's Office where it may be examined; however, no action with respect to a regulation shall be invalid because the reference to the subject matter thereof in such notice is insufficient.
- C. PUBLIC HEARING: On the date set for hearing on a proposed regulation, any interested party shall be afforded an adequate opportunity to comment on the proposed regulation through the presentation of facts or arguments or the submission of written materials. The proposed regulation may be amended at the hearing. All relevant matters presented shall be given full consideration by the Board of County Commissioners. All hearings shall be open to the public.
- D. PUBLICATION OF ADOPTED REGULATIONS: Adopted, amended or repealed regulations promulgated by the Board of County Commissioners shall be published according to Indiana State Statute publication requirements. Copies of all regulations and amendments thereto shall be on file in the County Engineer's Office.

- E. AMENDMENTS: After the initial adoption of the regulations, the County Commissioners may amend the regulations in accordance with the procedure set forth in this SECTION.
- F. TITLE: The regulations adopted pursuant to this SECTION shall be known as the General Drainage Standards and Regulations of Delaware County, Indiana.

# 4 - 66 - 16. MINIMUM DRAINAGE STANDARDS AND REGULATIONS

A. GENERAL COMPLIANCE: All land alterations accomplished in the unincorporated area of Delaware County, Indiana shall adhere to and be in compliance with the minimum drainage standards established by this ordinance and all regulations adopted by the Board of County Commissioners in accordance with SECTION 4-66-15, unless a variance from the minimum drainage standards or regulations has been granted pursuant to SECTION 4-66-14.

development. release rate of storm water from redevelopments, and new construction may not exceed the storm water runoff from the land area in its present state of development. The owner and/or developer must submit detailed computations of runoff before and development, redevelopment or new construction demonstrate that runoff will not be increased. computations must show that the peak runoff rate development for the 50 year return period storm of critical duration shall not exceed the 5 year return period predeveloment peak runoff rate. The critical duration storm is that storm duration that requires the greatest detention storage. Prior to deriving detailed computations, the owner and/or developer should consult with the County Engineer to determine the best method for computing runoff and the area to be considered in the computations. The areas to be considered may exceed an actual building site in order to carry out the purpose of this ordinance. The methods which may be used shall include, but are not limited to, the Rational Method and the Soil Conservation Service Method.

- B. MINIMUM STANDARDS FOR LAND ALTERATIONS OTHER THAN ONE OR TWO FAMILY DWELLINGS:
  - 1. GENERAL. Land alterations accomplished other than in conjunction with the construction, enlargement or location, on a permanent foundation, of a one- or two-family dwelling or accessory structure appurtenant to such dwelling shall be in accordance with standards found below and in accordance with regulations adopted by the County Commissioners which are pertinent to these standards. Land alterations shall be carried out

in conformity with covenants executed in connection with rezoning cases, commitments, variance conditions, plat restrictions, flood plain management requirements, and state and local building code standards.

- 2. DRAINAGE TO ADEQUATE RECEIVING PLACE. A drainage facility shall be provided which allows drainage of water runoff from each upper watershed area and from each portion of the land altered parcel to a place or places adequate to receive it.
- 3. DRAINAGE FACILITY CHARACTERISTICS: The drainage facility shall:
  - (a) Be capable of accommodating the ten (10) year design rainfall intensity, or a rainfall of greater intensity, without endangering the public safety and health, or causing significant damage to property;
  - (b) Be durable, easily maintained and safe to persons;
  - (c) Retard sedimentation and erosion.
- 4. RUNOFF ACCOMMODATION WITHIN PARCEL: The part of the drainage facility situated within the parcel, in addition to complying with the requirements stated above:
  - (a) Shall drain each and every part of the parcel;
  - (b) Shall be sufficient to accept:
    - The water runoff from the parcel after development; and
    - (2) The present water runoff from developed areas upstream; and
    - (3) The present water runoff from undeveloped areas upstream; and
  - (c) May include improvements such as retentiondetention systems in the instance where the condition of the land makes use of such improvements feasible and appropriate.
- 5. RUNOFF ACCOMMODATION DOWNSTREAM FROM PARCEL: As to drainage facilities located downstream and beyond the boundary of the parcel, the drainage system within the

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parcel shall be designed such that there will be no increase in peak discharge or runoff rates as a result of the development unless said downstream facilities located beyond the limits of the parcel are sufficient to accept:

- (a) The water runoff from the parcel after development; plus
- (b) The present water runoff from developed areas upstream; plus
- (c) The present water runoff from undeveloped areas upstream; plus
- (d) The present water runoff of those areas through which the drainage facility passes.
- 6. ACCEPTANCE OF UPSTREAM DRAINAGE: At least one opening shall be provided for each watershed at the upstream edge of the parcel to accept upstream drainage.
- 7. HABITABLE STRUCTURES FREE FROM 100-YEAR FLOODS: The drainage facility shall be such that all habitable structures' first floor elevation shall be (2) feet above a 100-year flood elevation, where applicable.
- 8. DAMAGE TO ADJOINING PROPERTY: Land alterations shall be accomplished so as to prevent damage or increased sheet runoff to adjoining property.
- 9. MAXIMUM SLOPE: The maximum vertical fall of earth on the parcel shall be six (6) inches per foot (two (2) horizontal to one (1) vertical). Slopes of other materials other than earth shall be at the safe angle of repose for the materials encountered.
- 10. PERMANENCY OF GRADES: Land alteration shall be accomplished in such a way that the grades left at the time that the work is completed will be permanent and stable.
- 11. SUBSURFACE DRAINAGE REQUIRED: Subsurface drainage shall be provided in areas having a high water table and be sufficient to intercept seepage that would:
  - (a) Affect earth slope stability of the building foundation; or
  - (b) Create undesirable wetness.

### C. RECOMMENDED STANDARDS FOR ONE OR TWO FAMILY DWELLINGS:

- 1. GENERAL: It is recommended that land alterations accomplished in conjunction with the construction, enlargement or location, on a permanent foundation, of a one- or two-family dwelling, or accessory structure appurtenant to either a one- or two-family dwelling be in accordance with standards found below and in accordance with regulations adopted by the County Commissioners which are pertinent to these standards.
- 2. SLOPES WITHIN 100 FEET OF BUILDING FOUNDATIONS: All final grades should slope away from building foundations as follows:
  - (a) Around each permanent building foundation there shall be a slope with a minimum vertical fall of six (6) inches for the area measured from the foundation to a point ten (10) feet from the building foundation or to the property line, whichever is closer; and
  - (b) Thereafter a slope with a minimum vertical fall of one-fourth inch per foot (two (2) percent) for pervious surfaces and a slope with a minimum vertical fall of one-sixteenth inch per foot (one-half (1/2) percent) for concrete, asphalt or other impervious surfaces for the area from the perimeter of the area subject to paragraph (1) above to a point one hundred (100) feet from the building foundation or into a drainage facility or to a propety line, whichever is closer.
- 3. ENTIRE PARCEL TO DRAIN: The land alterations should be accomplished in such a manner that water drains off each part of the parcel to a point or points having capacity to receive such water. For areas beyond the 100-foot area cited above, the slope shall have a vertical fall of at least one-sixteenth inch per foot (one-half (1/2) percent) into a drainage channel or swale.
- 4. HABITABLE STRUCTURES FREE FROM 100-YEAR FLOODS: The drainage facility should be such that all habitable structures' first floor elevation shall be two (2) feet above the 100-year flood elevation, where applicable.
- 5. UPSTREAM STORM WATER: The drainage facility should accommodate upstream storm water at any point or points entering the site.

- 6. DOWNSTREAM DRAINAGE: Design and construction of the drainage facility should provide for the discharge of storm water off-site at a point or points having capacity to receive upstream and on-site drainage.
- 7. DURABILITY AND MAINTENANCE: Design and construction of the drainage facility should be such that it will be durable and easy to maintain.
- 8. DAMAGE TO ADJOINING PROPERTY: Land alterations should be accomplished so as to prevent damage to adjoining property.
- 9. MAXIMUM SLOPE: The maximum vertical fall of earth on the parcel should be six (6) inches per foot (fifty (50) percent). Slopes of materials other than earth should be at the safe angle of repose for the materials encountered.
- 10. PERMANENCY OF GRADES: Land alteration should be accomplished in such a way that the grades left at the time that the work is completed will be permanent and stable.
- 11. SUBSURFACE DRAINAGE REQUIRED: Subsurface drainage should be provided in areas having a high water table and be sufficient to intercept seepage that would:
  - (a) Affect earth slope stability or stability of building foundations; or
  - (b) Create undesirable wetness.
- 12. BLOCKING DRAINAGEWAYS: No excavations or fills shall block or otherwise impede the free drainage of surface water in a drainage swale or channel.

# 4 - 66 - 17. MINIMUM STANDARDS FOR EROSION AND SEDIMENT CONTROL

- A. GENERAL REQUIREMENTS: Land alterations shall be accomplished in accordance with standards found in this SECTION and in accordance with regulations adopted by the County Commissioners which are pertinent to these standards.
- B. PROTECTION OF EXPOSED AREAS: Land alteration which strips the land of vegetation, including regrading, shall be done in a way that will minimize erosion. Whenever feasible, natural vegetation shall be retained, protected

and supplemented. Cut and fill operations shall be kept to a minimum to ensure conformity with existing topography so as to create the least potential erosion. The duration of time which an area remains exposed shall be kept to a practical minimum. The area shall be stabilized as quickly as practical.

- C. PROTECTION DURING DEVELOPMENT: Temporary vegetation or mulching shall be used to protect exposed areas during development.
- D. PERMANENT VEGETATION: Permanent and final vegetation or structural erosion-control devices shall be installed as soon as practical under the circumstances.
- E. SEDIMENT CONTROL: Sediment in runoff water shall be trapped by the use of such methods as debris basins and silt traps until the disturbed area is stabilized.

### 4 - 66 - 18. GENERAL DRAINAGE STANDARDS ADOPTED BY REFERENCE

The General Drainage Standards shall mean the General Drainage Standards and Regulations of Delaware County, Indiana, as promulgated by the Board of Commissioners of Delaware County, Indiana, as set forth in SECTION 4-66-15. The General Drainage Standards and Regulations of Delaware County, Indiana, and all amendments thereto, are hereby adopted by reference and incorporated as a part of the Storm Drainage and Sediment Control Ordinance set forth herein.

#### 4 - 66 - 19. VALIDITY

Should any section, subsection, paragraph, clause, word or provision of these regulations be declared by the courts to be unconstitutional or invalid, such decision shall not affect the validity of the regulations as a whole or any part thereof other than the part so declared to be unconstitutional or invalid.

### 4 - 66 - 20. REPEALER

All ordinances or parts of ordinances in conflict with the provisions of this ordinance are hereby repealed.

### 4 - 66 - 21. EFFECTIVE DATE

This ordinance shall be in full force and effect upon its

passage by the Board of Commissioners of Delaware County, Indiana, and such publication as required by law and upon the adoption of the General Drainage Standards and Regulations of Delaware County, Indiana as required by this ordinance.

Passed by the Board of County Commissioners of Delaware County,

Indiana, this \_\_\_\_\_\_, 1992\_\_\_.

BOARD OF COMMISSIONERS DELAWARE COUNTY, INDIANA

cordell Campbell, President

Ron Bonham, Member

Jack Peckinpaugh, Member

ATTEST:

Kent Riggin, Auditor

Delaware County, Indiana