

ORDINANCE NO. 21-02

FILED  
MAY 14 2002  
Ruth Dorer  
MUNCIE CITY CLERK

STORM DRAINAGE AND SEDIMENT CONTROL ORDINANCE

§ 1. PURPOSE

WHEREAS, there is a compelling necessity for the control of storm water runoff and the protection of soils within the City of Muncie, Indiana; and

WHEREAS, to insure, promote, and protect the orderly development of land within the City of Muncie, Indiana; and

WHEREAS, the Common Council of the City of Muncie, Indiana, is granted the authority to prepare a uniform plan for storm drainage and sediment control within the incorporated area of the City of Muncie, Indiana.

NOW, THEREFORE, BE IT ORDAINED by the Common Council of the City of Muncie, Indiana, under the authority of the Indiana Home Rule statutes, and Indiana Code 36-9-1 et. seq. and all acts of the General Assembly 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 the City of Muncie, Indiana by requiring compliance with standards and practices which result in proper storm water drainage and sediment control in the event of land alterations.

§ 2. JURISDICTION

The provisions of this ordinance shall be applicable throughout the incorporated area of the City of Muncie, Indiana.

§ 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 City of Muncie 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. DEFINITIONS

A BUILDING COMMISSIONER: As used herein, "Building Commissioner" shall mean the Building Commissioner of the City of Muncie, Indiana.

B. BOARD OF PUBLIC WORKS AND SAFETY. As used herein, "Board" shall mean the Board of Public Works and Safety of the City of Muncie, Indiana.

C. BOARD OF SANITARY COMMISSIONERS: As used herein, "Commissioners" and "Sanitary Commissioners" shall mean the Board of Sanitary Commissioners of the Muncie Sanitary District of the City of Muncie, Indiana.

D.SANITARY DISTRICT ENGINEER: As used herein, "Sanitary District Engineer" shall mean the Engineering Director of the Muncie Sanitary District, of the City of Muncie, Indiana.

E.DRAINAGE BOARD: As used herein, "Drainage Board" shall mean the Delaware County Drainage Board.

F.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.

G. 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 Common Council of the City of Muncie.
- (3) Obligations and requirements relating to drainage established under the Subdivision Control Ordinance of the City of Muncie, 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 and/or the Common Council of the City of Muncie, Indiana.
- (6) Conditions relating to drainage attached to a grant of appeal by the Delaware - Muncie Metropolitan Board of Zoning Appeals.

**H. 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.

**I. 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.

**J. MINOR LANDSCAPING:** As used herein, "Minor Landscaping" shall mean the planting and tilling of gardens, flower beds, shrubs, trees

**K. PARCEL:** As used in herein "parcel" shall mean the total area of land where the land alteration is proposed or accomplished.

**L. PERSON.** As used herein, "person" shall mean any natural person and any legal entity

**M. PLAN COMMISSION:** As used herein, "Plan Commission" shall mean the Delaware-Muncie Metropolitan Plan Commission.

**N. REGULATED DRAIN:** A drainage facility which falls under the jurisdiction of the Indiana Drainage Code.

O. COUNTY SURVEYOR: As used herein, or "County Surveyor" shall mean the Delaware County Surveyor.

P. CITY ENGINEER: As used herein, "City Engineer" shall mean the City of Muncie City Civil Engineer or a designee of the Mayor which designee may be the Civil Engineer member of the Board of Sanitary Commissioners.

Q. FIFTY YEAR RETURN FREQUENCY STORM: As used herein "fifty year return frequency storm" means a rainfall event for which the intensity and duration generate an accumulated depth expected only once every fifty years. It is also assumed to be maximum storm conditions for which protection is expected through these minimum standards.

## § 5. ADMINISTRATION

A. DRAINAGE PERMIT EXCLUSIONS: 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, which has no impact on adjacent properties;

- (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) A land alteration upon a lot in an approved subdivision plat, provided proper permits are obtained;

**B. DRAINAGE PERMITS APPLICATION:** No person shall undertake or accomplish any land alteration without having in force a written drainage permit obtained from the City Engineer. The drainage permit must be obtained before any work is initiated with the exception of testing to determine procedures or 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 City Engineer on forms prescribed by the Board of Public Works and Safety of the City of Muncie, Indiana. Within seven (7) working days from the date of filing for a drainage permit, the City Engineer shall either issue the permit or forward a written statement to the applicant indicating cause for non-issuance. 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 City Engineer if:

- (1) The application and the drainage plan with supplemental information have been properly prepared and submitted and reflect compliance with the General Drainage Standards for the City of Muncie, 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 City Engineer or another entity authorized to establish or enforce drainage requirements, a bond has been posted pursuant to the requirements of this ordinance;
- (4) If required by the City Engineer or another entity authorized to establish or enforce drainage requirements, a covenant has been executed pursuant to the requirements of this ordinance;
- (5) If required by the City Engineer or another entity authorized to establish or enforce drainage requirements, an easement has been dedicated pursuant to the requirements of this ordinance;
- (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 City Engineer. A drainage facility or system intended to be dedicated to the public, in whole or in part, must be accepted by the City of Muncie, Indiana, by action of the Board of Public Works and Safety of the City of Muncie, Indiana, as applicable, and no such drainage facility or system shall be accepted unless it is found to be in conformance with this Ordinance.

#### § 6. NONCONFORMING SITES

A land altered area 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 AREA: The gross area impacted by a land alteration is expanded by more than ten (10) percent. Repeated expansions of a land altered area 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 land altered area is intensified or the use of such area is changed, resulting in an increase in storm water runoff.

#### § 7. 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 Board, upon the recommendation of the City Engineer, extend the validity of the permit for an additional period of time.

#### § 8. BONDS, COVENANTS AND EASEMENTS

A. BONDS: The Board, upon the recommendation of the City Engineer, may as a prerequisite to the issuance of a drainage permit, require the posting of a performance bond with surety to the approval of the Board. Such bond shall name the City of Muncie, Indiana, as the obligee who can enforce the obligations thereunder, and shall be in an amount established by the Board as adequate to provide for the satisfactory completion of the improvements required by the drainage permit. In instances where the Board has required a performance bond pursuant to the provisions of this ordinance, the Board 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 ordinance, subject to the approval of any other department or agency whose interests are protected by the same bonding requirement.

**B. COVENANTS:** Where the City 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 may, as a prerequisite to the issuance of a drainage permit, require the execution of covenants and/or easements running in form to the City of Muncie, Indiana by the owner or owners of such parcel. As a minimum in such cases, the Board 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 and/or the Drainage Board and the requirements of all drainage permits for this plat issued by the City Engineer's Office."

**C. EASEMENTS:** The Board may, upon recommendation from the City Engineer and as a prerequisite to issuance of a drainage permit, require the dedication of easements to the appropriate public agency 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.

#### § 9. INVESTIGATIONS AND INSPECTIONS

The power to make investigations and inspections of land alterations shall be vested in the City Engineer. Investigation and inspection of land alterations may be made at any time by going upon, around or 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. 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.

#### § 10. ENFORCEMENT

**A. FEES FOR PERMITS OBTAINED AFTER COMMENCEMENT OF WORK:** If work for which a drainage permit is required by this ordinance is commenced without a permit the permit fee shall be double the applicable amount stated in this ordinance because of the increased amount of inspection and administrative work; provided, however, that the maximum fee incurred 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 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 Board of Works 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 City Engineer, the Sanitary District Engineer or the City 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
- (3) Land alteration for which a drainage permit is 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.

D. CIVIL ACTION: The City of Muncie, acting by resolution of the Board of Public Works and Safety, may initiate a civil action to restrain any person accomplishing a land alteration from violating a drainage requirement or plans and specifications filed in order to obtain a drainage permit or violating any other provision of this ordinance.

- (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 drainage 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 violating the provisions of this ordinance, any regulation promulgated pursuant to this ordinance, any minimum standard found in this ordinance or any other drainage requirement as defined in this ordinance 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.

**F. ENFORCEMENT OF COVENANTS:** Any person who violates a covenant required under the provisions of this ordinance, 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 City Engineer, the Sanitary District Engineer or by the City Building Commissioner, that a violation exists, and shall be given a reasonable period of time in which to correct such violation. The notice shall specify the nature of the violation with reasonable clarity. If the person responsible for the violation of a covenant required under the provisions of this ordinance, 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, The City of Muncie shall have the authority to correct the violation at its expense and to recover in a civil action all expenses incurred for effecting such correction, together with reasonable attorneys fees and expenses of such actions.

#### § 11. VARIANCES AND DEVIATIONS FROM PLAN

**A. PROCEDURE:** The Board shall have the power to modify or waive any minimum drainage standard found in this ordinance. The Board 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 unfeasible 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 City Engineer who shall present the request to the Board at the first regularly scheduled Board meeting following the filing of the request. The Board shall make a decision on the request for a variance within thirty (30) days after the request was filed with the City 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 Board of Works. 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.

## § 12. FEES

A. AMOUNT: For a 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 shall be \$20.00 per acre with a minimum fee of \$20.00 and a maximum fee of \$200.00

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 the City of Muncie, Indiana in the course of governmental duties.

C. PAYMENT: All drainage permit fees shall be collected by the Engineer's Office at the time the permit is issued and shall be deposited with the Controller of the City of Muncie, Indiana.

## § 13. PROFESSIONALLY PREPARED AND CERTIFIED DRAINAGE PLANS

A drainage plan fulfilling the requirements of this ordinance shall be submitted to the Office of the City 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 City 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 a commonly used scale, and an arrow indicating north shall appear as needed for clarity. Existing land contours shall be shown at an interval necessary for clarity. 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 located in the plans by dimensions from traverse lines, property markers or road center 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 coordinate system or other acceptable horizontal and vertical datum. If applicable, the drainage plan should show the direction of flow, elevation of 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 for any constructed flow lines. The plan shall show appropriate right-of-way and easement limits. The 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 commonly used scale. 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. If the storm drain is to be constructed on fill, the 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 the City of Muncie, 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 travel time in man-made structures shall be indicated.

(2) Closed conduit and open channel design computations shall include the size of pipe or channel cross section, pipe or channel 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 this ordinance and all regulations promulgated thereunder. The City 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 City 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 the City of Muncie, 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.

Signature \_\_\_\_\_ Date \_\_\_\_\_

Typed/Printed Name \_\_\_\_\_

(SEAL)

Business Address \_\_\_\_\_

Surveyor \_\_\_\_\_ Engineer \_\_\_\_\_ Architect \_\_\_\_\_

Indiana Registration Number \_\_\_\_\_

All drainage plans submitted under this SECTION to the City 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 occurring \_\_\_\_\_  
\_\_\_\_\_

Plan Date \_\_\_\_\_

I will perform periodic observations of this project during construction to determine that such land alteration is in accordance with both the applicable drainage requirements and the drainage plan for this project submitted for a drainage permit to the Office of the City Engineer of the City of Muncie, 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, surveyor or architect engaged in storm drainage design, shall execute and file with the City 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 the City of Muncie, 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

\_\_\_\_\_

Signature \_\_\_\_\_ Date \_\_\_\_\_

Type/Printed Name \_\_\_\_\_ Phone \_\_\_\_\_

(SEAL)

Business Address \_\_\_\_\_

Surveyor \_\_\_\_\_ Engineer \_\_\_\_\_ Architect \_\_\_\_\_

Indiana Registration Number \_\_\_\_\_

#### § 14. REGULATED DRAIN CLEARANCE

A. PROCESS: Prior to any land alteration the applicant 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.

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 a subdivision for which a plat and a drainage plan have been approved provided the land alteration 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.

#### § 15. MINIMUM DRAINAGE STANDARDS AND REGULATIONS

A. GENERAL COMPLIANCE: All land alterations accomplished in the incorporated area of the City of Muncie, Indiana shall adhere to and be in compliance with the minimum drainage standards established by this ordinance and all regulations promulgated by the Board in accordance with this ordinance, unless a variance from the minimum drainage standards or regulations has been granted by the Board.

B. PROTECTION DOWNSTREAM OF A LAND ALTERATION: The release of runoff from a land alteration shall not increase the peak flow generated by the fifty year return frequency storm over the entire watershed of the receiving drainage facility at the point of the release by any



amount greater than the runoff generated by a five year return frequency storm over the undeveloped land altered site..

(1). Direct non-detained release of runoff from a land alteration is required when the peak flow from the land alteration that is generated by the fifty year return frequency storm does not increase the peak flow generated by the fifty year return frequency storm over the entire watershed of the receiving drainage facility at the point of release by any amount greater than the runoff generated by a five year return frequency storm over the undeveloped land altered site..

(2). Compliance with the release limitations must be provided either by improving the capacity of the receiving drainage facility or by retaining/detaining the runoff and releasing the runoff at a lesser rate or a combination of both.

(a). If improving the capacity of the receiving drainage facility is to be done then the reconstruction shall extend from the point of connection to a point downstream where adequate capacity exists, or to a point along the downstream waterway where the total watershed area has increased by an amount equaling ten times the area of the land alteration. If the receiving drainage facility is not under some form of perpetual maintenance then such must be created through purchase of right of way, easement or regulated drain action by the County Drainage Board.

(3). If the receiving drainage facility is a combination sewer then the maximum rate of release shall be limited to that portion of the sewer's capacity which represents the ratio of the area of the land alteration to the area of the sewer's upper watershed from the point of the connection.

C. PROTECTION UPSTREAM OF A LAND ALTERATION The drainage facilities constructed on a land altered site shall include provisions for accepting all drainage entering the site. Such provisions must have the capacity to accept the runoff generated by the 50 year return frequency storm over the present land use of the off site upper watershed areas. No excavations or fills shall block or otherwise impede the free drainage of surface water in a drainage way.

D. PROTECTION ON THE LAND ALTERED SITE It is not the intent of these minimum standards to intervene into the professional relationship between a practicing engineer and his client nor are they intended to guaranty the practicing engineer's performance in protecting the applicant's facilities. However, drainage facilities constructed on a land altered site shall:

- (a) Be durable, easily maintained and safe to persons;
- (b) Sufficiently sized to produce the results required of this ordinance.
- (c) Retard sedimentation and erosion.

E. **SUBSURFACE DRAINAGE REQUIRED:** Subsurface drainage shall be provided in areas where water table would cause undesirable wetness.

#### § 16. MINIMUM STANDARDS FOR EROSION AND SEDIMENT CONTROL

A. **GENERAL REQUIREMENTS:** Land alterations shall be accomplished in accordance with standards found in this ordinance and in accordance with regulations adopted by the Board of Public Works and Safety which are pertinent to these standards.

B. **PROTECTION OF EXPOSED AREAS:** Land alteration which strips the land of vegetation, including re-grading, 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.

#### § 17. PROCEDURE FOR PROMULGATION OF REGULATIONS

A. **AUTHORIZATION:** The Board shall adopt, amend or repeal regulations which more specifically deal with the subject matter of the standards found in this ordinance. The provisions of such regulations shall be consistent with the standards of this ordinance. Any conflict between this ordinance and the regulations shall be reconciled in favor of the ordinance.

B. **NOTICE OF HEARING:** Before any regulation is adopted, amended or repealed by the Board as authorized by this section, the Board 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 City 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 Works. All hearings shall be open to the public.

D. PUBLICATION OF ADOPTED REGULATIONS: Adopted, amended or repealed regulations promulgated by the Board shall be published according to Indiana State Statute publication requirements. Copies of all regulations and amendments thereto shall be on file in the City Engineer's Office.

E. AMENDMENTS: After the initial adoption of the regulations, the Board may amend the regulations in accordance with the procedure set forth in this ordinance.

F. TITLE: The regulations adopted by the Board pursuant to this ordinance shall be known as the General Drainage Standards and Regulations of the City of Muncie, Indiana.

#### § 18. GENERAL DRAINAGE STANDARDS ADOPTED BY REFERENCE

The General Drainage Standards shall mean the General Drainage Standards and Regulations of City of Muncie, Indiana, as promulgated by the Board as set forth in this ordinance. The General Drainage Standards and Regulations of the City of Muncie, 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.

#### § 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.

#### § 20. REPEALER

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

#### § 21. EFFECTIVE DATE

This ordinance shall be in full force and effect upon its passage by the Common Council of the City of Muncie, Indiana, and such publication as required by law.

Passed by the Common Council of the City of Muncie, Indiana this 3rd day of

June, 2002.

	Yeas	Nays	Abstained	Absent
Robert S. Marshall	<u>✓</u>	<u>   </u>	<u>   </u>	<u>   </u>
David A. Taylor	<u>✓</u>	<u>   </u>	<u>   </u>	<u>   </u>
Mary Jo Barton	<u>✓</u>	<u>   </u>	<u>   </u>	<u>   </u>
John P. Isenbarger	<u>✓</u>	<u>   </u>	<u>   </u>	<u>   </u>
James P. Carey	<u>✓</u>	<u>   </u>	<u>   </u>	<u>   </u>
Monte M. Murphy	<u>✓</u>	<u>   </u>	<u>   </u>	<u>   </u>
Chuck Leonard	<u>✓</u>	<u>   </u>	<u>   </u>	<u>   </u>
William Shroyer	<u>✓</u>	<u>   </u>	<u>   </u>	<u>   </u>
Bruce Wiemer	<u>✓</u>	<u>   </u>	<u>   </u>	<u>   </u>

William Shroyer  
William Shroyer, President  
City Council, City of Muncie

Presented by me to the Mayor for his approval, this 4th day of June, 2002.

Ruth N. Dorer  
Ruth Dorer, City Clerk

The above Ordinance is approved/vetoed by me this 13 day of July, 2002.

Dan Canan  
Dan Canan, Mayor

ATTEST: Ruth N. Dorer  
Ruth Dorer, City Clerk

This ordinance is proposed by David A. Taylor  
Council Member

This ordinance is approved in form by Frank C. Wilkinson, City Atty.

ORDINANCE NO 011-02

Passed by the Common Council of the City of Muncie, Indiana this 3rd day of June, 2002.

	Yeas	Nays	Abstained	Absent
Robert S. Marshall	<u>/</u>	_____	_____	_____
David A. Taylor	<u>/</u>	_____	_____	_____
Mary Jo Barton	<u>/</u>	_____	_____	_____
John P. Isenbarger	<u>/</u>	_____	_____	_____
James P. Carey	<u>/</u>	_____	_____	_____
Monte M. Murphy	<u>/</u>	_____	_____	_____
Chuck Leonard	<u>/</u>	_____	_____	_____
William Shroyer	<u>/</u>	_____	_____	_____
Bruce Wiemer	<u>/</u>	_____	_____	_____

William Shroyer  
 William Shroyer, President  
 City Council, City of Muncie

Presented by me to the Mayor for his approval, this 4th day of June, 2002.

Ruth N. Dorer  
 Ruth Dorer, City Clerk

The above Ordinance is approved/vetoed by me this 13 day of July, 2002.

Dan Canan  
 Dan Canan, Mayor

ATTEST: Ruth N. Dorer  
 Ruth Dorer, City Clerk

This ordinance is proposed by David A. Taylor  
 Council Member

This ordinance is approved in form by Frank C. Wilkinson, City Atty.