

ORDINANCE NO. 2024-18

**THE MORGAN COUNTY
STORMWATER MANAGEMENT ORDINANCE**

WHEREAS, the Board of Commissioners of Morgan County, Indiana, ("Board of Commissioners") is the executive and legislative body of Morgan County, Indiana;

WHEREAS, the Morgan County Drainage Board ("Drainage Board") is established pursuant to I.C. 36-9-27 and its membership consists of the Board of Commissioners;

WHEREAS, it is necessary to establish stormwater management requirements and controls in Morgan County to protect and safeguard the general health, safety, and welfare of the public, and so that Morgan County may comply with all requirements of Municipal Separate Storm Sewer System General Permit;

WHEREAS, the Board of Commissioners and Drainage Board have the authority to adopt a stormwater management ordinance pursuant to I.C. 36-1-3; and,

WHEREAS, the Board of Commissioners and Drainage Board, having considered the proposed Morgan County Stormwater Management Ordinance and heard public comment, deem it appropriate that the Morgan County Stormwater Management Ordinance be adopted.

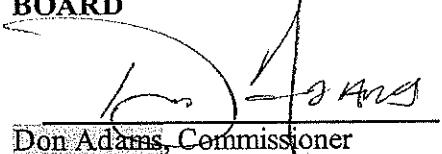
BE IT THEREFORE ORDAINED by the Board of Commissioners of Morgan County Indiana, as follows:

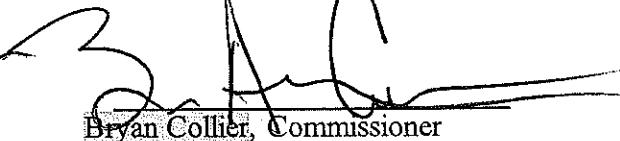
1. The Morgan County Stormwater Management Ordinance is hereby adopted.
2. The Morgan County Stormwater Management Ordinance shall be effective upon publication, as required under I.C. 36-2-4-8.
3. The Morgan County Stormwater Management Ordinance shall be printed as a separate book and two (2) copies of the book shall be filed with the Morgan County Auditor and such additional copies shall be maintained for sale to the public by the Morgan County Surveyor, the Morgan County Planning Department, or such other agency deemed appropriate.

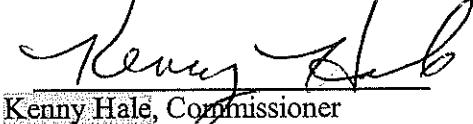
MORGAN COUNTY STORMWATER MANAGEMENT ORDINANCE

So Passed and Ordained this 21st day of October, 2024.

**MORGAN COUNTY BOARD OF
COMMISSIONERS and the
MORGAN COUNTY DRAINAGE
BOARD**


Don Adams, Commissioner


Bryan Collier, Commissioner


Kenny Hale, Commissioner

ATTEST:


Terry Brock

Morgan County Surveyor

1.0 Introduction

1.1 Findings

- (A) Water bodies, roadways, structures, and other property within, and downstream of Morgan County are at times subjected to flooding;
- (B) Flooding is a danger to the lives and property of the public and is also a danger to the natural resources of Morgan County and the region;
- (C) Land development alters the hydrologic response of watersheds, resulting in increased stormwater runoff rates and volumes, flooding, stream channel erosion, and sediment transport and deposition;
- (D) Stormwater runoff produced by land development contributes to increased quantities of water-borne pollutants;
- (E) Stormwater runoff, soil erosion, and non-point source pollution, due to land development within Morgan County, have resulted in the deterioration of the water resources of Morgan County and downstream municipalities. Increased stormwater runoff rates and volumes, and the sediments and pollutants associated with stormwater runoff from development projects within Morgan County may, absent reasonable regulation and control, adversely affect Morgan County's water bodies and water resources, and those of downstream municipalities.
- (F) Stormwater runoff, soil erosion, and non-point source pollution can be controlled and/or minimized by the regulation and management of stormwater runoff from development;
- (G) Adopting the standards, criteria, and procedures contained in this Ordinance and implementing the same will address many of the detrimental effects of stormwater runoff; and,
- (H) Adopting these standards is necessary for the preservation of the soils and topography of Morgan County as well as the public health, safety, and welfare.

- 1.2** Morgan County has the authority to adopt a Stormwater Management Ordinance pursuant to Indiana Code 36-9-23-1 et seq., by "Home Rule" and further as required by Phase II of the National Pollutant Discharge Elimination System Stormwater program (40 CFR Parts 9, 122, 123, and 124; December 8, 1999) authorized by the 1987 amendments to the Clean Water Act, the Indiana Department of Environmental Management's (IDEM) Municipal Separate Storm Sewer System (MS4) General Permit (MS4GP), and the Indiana Department of Environmental Management's Construction Stormwater General Permit (CSGP)Purpose

It is the purpose of this Ordinance to establish minimum stormwater management requirements and controls to protect and safeguard the general health, safety, and

welfare of the public. This Ordinance seeks to accomplish, among others, the following objectives:

- (A) To reduce flood damage;
- (B) To mitigate increased stormwater runoff rates and volumes from identified new land development;
- (C) To minimize the deterioration of existing watercourses, culverts and bridges, and other structures associated with stormwater conveyance;
- (D) To encourage water recharge into the ground where geologically favorable conditions exist;
- (E) To reduce the potential for point-source and non-point source pollution through requirements for construction site stormwater Best Management Practices (BMPs) and post construction stormwater quality BMPs;
- (F) To maintain the integrity of stream channels for biological functions, as well as for drainage and other purposes;
- (G) To minimize the impact of development upon stream bank and stream bed stability;
- (H) To reduce erosion and off-site sedimentation from development or construction projects;
- (I) To preserve and protect water supply facilities and water resources by means of controlling increased flood discharges, stream erosion, and runoff pollution;
- (J) To reduce stormwater runoff rates and volumes, soil erosion, and non-point source pollution, wherever practicable, from lands that were developed without stormwater management controls meeting the purposes and standards of this Ordinance as well as future developments; and,
- (K) To implement the minimum standards established in this Ordinance to protect water bodies from degradation resulting from changing land use where there are insufficient stormwater management controls.
- (L) To protect adjoining property owners from detrimental impacts caused by changing land use and/or drainage.
- (M) To ensure that mineral extraction is carried out without adverse impact on water bodies or nearby landowners.
- (N) To comply with the standards set forth in the Indiana Department of Environmental Management's (IDEM) Municipal Separate Storm Sewer System (MS4) General Permit (MS4GP).

1.3 Applicability, Exemptions and General Provisions

MORGAN COUNTY STORMWATER MANAGEMENT ORDINANCE

This Ordinance shall apply to any development within the unincorporated boundaries of Morgan County within the jurisdiction of this Ordinance which include land disturbance. Refer to the Morgan County Stormwater Design Manual for land disturbance calculation guidance.

Projects with greater than or equal to 0.5 acres and less than 1 acre of land disturbance shall obtain SWMPA from the County.

Projects with greater than or equal to 1 acre of land disturbance shall obtain SWMPA from the County and a CSGP from IDEM.

The following agricultural operations are considered development for the purposes of this Ordinance:

- (A) Buildings, including barns and buildings to house livestock.
- (B) Roads associated with infrastructure.
- (C) Agricultural waste lagoons and other facilities.
- (D) Lake, ponds and impoundments.
- (E) Wetlands constructed voluntarily or as mitigation.
- (F) Other infrastructure

This Ordinance shall not apply to the following:

- (A) The installation or removal of individual mobile homes within a mobile home park. This exemption shall not be construed to apply to the construction, expansion, or modification of a mobile home park.
- (B) Agricultural land-disturbing activities, including tillage, planting, cultivation, or harvesting operations to produce agricultural or nursery and vegetative crops, pasture renovation and establishment, the construction of agricultural conservation practices, and the installation and maintenance of agricultural drainage tile.
- (C) Plats with preliminary plat approval and other developments with final land use approval prior to the effective date of this Ordinance, where such approvals remain in effect.
- (D) Building additions where the total increase in impervious surface including parking lots, sidewalks, etc., is less than 10,000 square feet except where the Office of the Morgan County Surveyor's Office (County) has identified flooding concerns.
- (E) Silvicultural activities associated with non-point source discharges (40 CFR 122.27).
- (F) Stormwater discharges associated with oil and gas exploration, production, processing or treatment operations, or transmission facilities (40 CFR 122.26).
- (G) Ditch maintenance for activities performed on a regulated drain by a county drainage board as defined in IC 36-9-27.

(H) The land-disturbing activities listed below, provided other applicable permits contain provisions requiring immediate implementation of erosion and sediment control measures and stormwater management measures:

- (i) Landfills that have been issued a certification of closure under 329 IAC 10.
- (ii) Coal mining activities permitted under IC 14-34.
- (iii) Municipal solid waste landfills that are accepting waste pursuant to a permit issued by IDEM under 329 IAC 10 that contains equivalent stormwater requirements, including the expansion of landfill boundaries and construction of new cells either within or outside the original solid waste permit boundary.

1.4 Variances

A variance from any or all requirements of this Ordinance may be granted by the specific approval of the County. No variance shall be approved that would ultimately result in failure by the County to meet the requirements of any Federal or State law. Variance requests that are denied will list how it diminishes the protective standards from human health or the environment set forth by the Ordinance. A denied variance may be appealed to the Morgan County Drainage Board (Board) within sixty (60) days of receipt of the denial. Requests for variance from the requirements of this Ordinance must be in written form, addressed to the County and demonstrate the following:

- (A) Specify the provision(s) of this Ordinance and/or the provision(s) of the Stormwater Design Manual from which the variance is requested,
- (B) Clearly state the reason for the variance request and why the conditions of this Ordinance cannot be met, and
- (C) Describe how the requested variance does not diminish the protective standards for human health or the environment set forth by the Ordinance.

1.5 Compatibility with Other Permit and Ordinance Requirements

This Ordinance is not intended to interfere with or annul any other ordinance, rule or regulation, statute, or other provision of law. The requirements of this Ordinance should be considered minimum requirements, and where any provision of this Ordinance imposes restrictions different from those imposed by any other ordinance, rule or regulation, or other provision of law, whichever provisions are more restrictive or impose higher protective standards for human health or the environment shall be considered to take precedence.

1.6 Severability

If the provisions of any article, section, subsection, paragraph, subdivision or clause of this Ordinance shall be judged invalid by a court of competent jurisdiction, such order of judgment shall not affect or invalidate the remainder of any article, section, subsection, and paragraph.

1.7 Fees

The fee schedule for the following shall be as established by Ordinance ?-?-?:

- (A) Fees for Violations
- (B) Erosion Control Permit Fee
- (C) Technical Plan Review Fee
- (D) Post Construction BMP Inspection Fee

1.8 Development of a Stormwater Design Manual

The Board has furnished additional policy, criteria and information including specifications and standards, for the proper implementation of the requirements of this Ordinance in the form of a Morgan County Stormwater Design Manual.

This manual includes details of acceptable stormwater management and treatment practices, including specific design criteria for each stormwater practice. The manual may be updated and expanded as necessary and needed from time to time by the County, subject to approval by the Board, based on improvements in engineering, science, monitoring and local maintenance experience. Stormwater treatment practices that are designed and constructed in accordance with the design and sizing criteria will be presumed to meet the minimum water quality and quantity performance standards.

2.0 Definitions

- (1) Base Flood – A flood having a one (1) percent probability of being equaled or exceeded in any given year (also referred to as the 100-year flood).
- (2) Base Flood Elevation (BFE) – The height of the Base Flood in relation to the North American Vertical Datum of 1988 (NAVD 88); commonly referred to as the "100-year flood elevation".
- (3) Best Management Practice or "BMP" - Any structural or nonstructural control measure utilized to improve the quality and, as appropriate, reduce the storm water run-off rate. The term includes schedules of activities, prohibitions of practice, treatment requirements, operation and maintenance procedures, use of containment facilities, land use planning, policy techniques, and other practices that comply with Morgan County's Stormwater Design Manual.
- (4) Board – The Morgan County Drainage Board.
- (5) Building – An enclosed structure constructed or erected partially or wholly above ground. The term "building" includes both the above-ground and the below-ground portions of the structure.
- (6) Building Opening – Any opening of a solid wall such as a window or door, through which floodwaters could penetrate.
- (7) Channel – A conveyance intended to carry runoff such as a swale or ditch.
- (8) Clean Water Act – The Federal Water Pollution Control Act, 33 USC Sec 1251 et

seq., as amended, and the applicable regulations promulgated thereunder..

- (9) Construction Site Stormwater Runoff – Stormwater runoff from a development site following a land alteration.
- (10) Conveyance – Any structural process for transferring stormwater between at least two (2) points. The term includes piping, ditches, swales, curbs, gutters, catch basins, channels, storm drains, and roadways.
- (11) Culvert – A closed conduit such as a pipe designed for the conveyance of surface drainage water under a roadway, railroad, embankment or other impediment. (See also Pipe System)
- (12) Detention – A system which is designed to capture stormwater, store it, and release it over a given period of time through an outlet structure at a controlled rate.
- (13) Detention Facility – A manmade structure for the temporary storage of stormwater runoff with a controlled release during or immediately following a storm.
- (14) Developed or Development – A land alteration that requires, pursuant to state law or local ordinance, the approval of a site plan, plat, special land use, planned unit development, rezoning of land, land division approval, private road approval, or other approvals required for the construction of land or the erection of buildings or structures; provided, however, that for purposes of this Ordinance only, developed or development shall not include the actual construction of, or an addition, extension or modification to, an individual single-family or a two-family detached dwelling.
- (15) Developer – Any person proposing or implementing the development of land.
- (16) Development Site – Any land that is being or has been developed or that a developer proposes for development.
- (17) Discharger – Any person who directly or indirectly discharges stormwater from any property. Discharger also means any employee, officer, director, partner, contractor, or other person who participates in, or is legally or factually responsible for, any act or omission that is or results in a violation of this Ordinance.
- (18) Ditch – An earthen conveyance with side slopes steeper than 5:1 or carrying greater than 10 cubic feet per second,
- (19) Drain – A buried slotted or perforated pipe or other conduit (subsurface drain) or a ditch (open drain) for carrying off surplus groundwater or surface water.
- (20) Drainage – The collection, conveyance, or discharge of ground water and/or surface water.
- (21) Drainage Facilities – All ditches, channels, conduits, retention-detention systems, tiles, swales, sewers, and other natural or artificial means of draining stormwater from land.

- (22) Easement - An authorization grant by a property owner for the use by another of any designated part of his property for a clearly specified purpose including but not limited to common pedestrian ways and hiking and biking paths.
- (23) Engineer – A person licensed to practice engineering in the State of Indiana.
- (24) Erosion – The detachment and movement of soil, sediment, or rock fragments by water, wind, ice, or gravity.
- (25) USEPA – The United States Environmental Protection Agency.
- (26) Federal Emergency Management Agency (FEMA) – The agency of the federal government charged with emergency management.
- (27) Flood or Flooding – A general and temporary condition of partial or complete inundation of normally dry land areas resulting from the overflow of water bodies or the unusual and rapid accumulation of surface water runoff from any source.
- (28) Floodplain – Any land area subject to periodic flooding.
- (29) Flood-Proofing – Any structural and/or non-structural additions, changes, or adjustments to structures or property that reduce or eliminate flood damage to land, or improvements utilities and structures.
- (30) Flood Protection Elevation (FPE) or Flood Protection Grade (FPG) – The Base Flood Elevation plus two (2) feet at any given location.
- (31) Floodway – The channel of any watercourse and the adjacent land areas that must be reserved to carry and discharge a base flood without cumulatively increasing the water surface elevation more than one-tenth (1/10) of a foot due to the loss of flood conveyance or storage.
- (32) Forebay – A small pond placed in front of a larger retention/detention structure such as a wet pond, dry pond, or wetland to intercept and concentrate a majority of sediment that is coming into the system before it reaches the larger structure.
- (33)
- (34) Grading – Any stripping, excavating, filling, and stockpiling of soil or any combination thereof and the land in its excavated or filled condition.
- (35) Gutter Spread – The spread of water on a roadway surface perpendicular from the face of the gutter into the driving lane.
- (36) IDEM – The Indiana Department of Environmental Management.
- (37) Illicit Connection – Any method or means for conveying an illicit discharge into water bodies or Morgan County's stormwater conveyance system.
- (38) Illicit Discharge – Any discharge to water bodies that does not consist entirely of

stormwater, discharges pursuant to the terms of an NPDES permit, or exempted discharges as defined in this Ordinance.

- (39) Impervious Surface – Any surface that prevents or significantly reduces the ability of stormwater to readily infiltrate into the underlying natural soil such as asphalt, concrete, roofs, and gravel.
- (40) Land Alteration – Any action taken relative to land which either:
 - (a) Removes the natural ground cover; or
 - (b) Changes the contour; or
 - (c) Increases the runoff rate; or
 - (d) Changes the elevation; or
 - (e) Decreases the rate at which water is absorbed; or
 - (f) Changes the drainage pattern; or
 - (g) Creates or changes a drainage facility; or
 - (h) Involves construction, enlargement, or location of any building on a permanent foundation; or
 - (i) Creates an impoundment.

Land alteration includes (by way of example and not of limitation) terracing, grading, excavating, constructing earthwork, draining, installing drainage tile, filling, and paving.

- (41) Land Disturbing Activity - Any manmade change of the land surface, including removing vegetative cover that exposes the underlying soil, excavating, filling, transporting, and grading.
- (42) Land Surveyor – A person licensed to practice land surveying in the State of Indiana.
- (43) Larger Common Plan of Development or Sale - A plan, undertaken by a single project site owner or a group of project site owners acting in concert, to offer lots for sale or lease; where such land is contiguous, or is known, designated, purchased, or advertised as a common unit or by a common name, such land must be presumed as being offered for sale or lease as part of a larger common plan. The term also includes phased or other construction activity by a single entity for its own use.
- (44) Lowest Floor – The lowest floor or the lowest enclosed area (including a basement), but not including an unfinished or flood-proof enclosure that is usable solely for parking of vehicles or building access.
- (45) Maintenance – Cleaning, removing obstructions from and making minor repairs to a drainage facility so that it will perform the function for which it was designed and

constructed.

(46) Manufactured BMP – A structural BMP designed for stormwater quality treatment constructed of a combination of manmade materials at an off-site facility.

(47) Mineral Extraction – The removal of oil, gas, coal, ore, gravel, sand, aggregate or other resources from below the surface of the land.

(48) Municipal Storm Sewer System (MS4) – A conveyance or system of conveyances, including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels, or storm drains, which is:

- (i) owned or operated by a federal, state, city, town, county, district, association, or other public body (created by or pursuant to state law) having jurisdiction over stormwater, including special districts under state law such as a sewer district, flood control district, or drainage district, or similar entity, or a designated and approved management agency under Section 208 of the Clean Water Act (33 U.S.C. 1288) that discharges into waters of the state; or privately owned stormwater utility, hospital, university, or college having jurisdiction over stormwater that discharges into waters of the state;
- (ii) designed or used for collecting or conveying stormwater;
- (iii) not a combined sewer; and
- (iv) not part of a publicly owned treatment works (POTW) as defined at 40 CFR 122.2

(49) Non-point Source Pollution – Pollution from any source other than from any discernible, confined, and discrete conveyances, and including, but not limited to, pollutants from agricultural, silvicultural, mining, construction, subsurface disposal, urban runoff sources, and sources of sediment.

(50) Non-Stormwater Discharge – Any discharge to the storm drain system that is not composed entirely of stormwater.

(51) Non-structural BMP – A BMP that is not constructed by physical means of land disturbance such as education, public information handouts, etc.

(52) NPDES – National Pollution Discharge Elimination System.

(53) Peak Storm – The storm of a specified return period that produces the maximum runoff from a site or the maximum elevation in a detention pond. Storm durations of 0.5-, 1-, 2-, 3-, 6-, 12- and 24-hours shall be used to determine the peak storm.

(54) Perimeter Drain – A subsurface pipe network designed and installed around the perimeter of a septic field for the purpose of effectively collecting and draining away excess subsurface waters.

(55) Person – An individual, firm, partnership, association, public or Private Corporation, public agency, instrumentality, or any other legal entity.

- (56) Pipe System – Two or more pipes connected by one or more structures such as a manhole designed to convey stormwater runoff.
- (57) Plan – Written narratives, specifications, drawings, sketches, written standards, operating procedures, or any combination of these, which contain information pursuant to this Ordinance.
- (58) Point Source Pollution - Any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged.
- (59) Pollutant – A substance which causes or contributes to pollution which includes, but is not limited to the following: any dredged spoil, solid waste, vehicle fluids, yard wastes, animal wastes, agricultural waste products, sediment, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological wastes, radioactive materials, heat, wrecked or discharged equipment, rock, sand, cellar dirt, and industrial, municipal, commercial and agricultural waste, or any other contaminant or other substance defined as a pollutant under the Clean Water Act.
- (60) Pollution – The human-made or human-induced alteration of the quality of waters by waste to a degree which unreasonably affects, or has the potential to unreasonably affect, either the waters for beneficial uses or the facilities which serve these beneficial uses.
- (61) Property Owner – Any person having legal or equitable title to property, having a contractual interest in property, or any person having or exercising care, custody, or control over any property.
- (62) Reclamation Plan for Mineral Extraction – A document illustrating drainage patterns, both existing and proposed, at a mineral extraction site; proposed erosion control and off-site sedimentation control of the site; and proposed final land use and post construction stormwater quality BMPs for the site, all of which are documented at the initial approval of the SWMP and at 10-year intervals following the approval of a SWMP.
- (63) Record Drawings – Drawings prepared, signed, and sealed by a professional engineer or land surveyor representing the final “as-built” record of the actual in-place elevations, location of structures, and topography.
- (64) Registered Professional – An engineer, land surveyor or architect license under the laws of the State of Indiana to practice the respective profession.
- (65) Regulated Drain – A drain, either open channel or closed tile/sewer, subject to the provisions of the Indiana Drainage Code, I.C.-36-9-27.
- (66) Retention – A system that is designed to capture stormwater and contain it until it infiltrates into the soil or evaporates.

(67) Right-of-way – A strip of land occupied or intended to be occupied by a street, pedestrian-way, hiking path, biking path, crosswalk, railroad, electric transmission line, oil or gas pipeline, water main, sanitary or storm sewer main, special landscaping, drainage, or for another special use. The usage of the term “right-of-way” for land platting purposes shall mean that every right- of-way hereafter established and shown on a final plat is to be separate and distinct from the lots or parcels adjoining such right-of-way and not included within the dimensions or areas of such lots or parcels. Rights-of-way intended for streets, crosswalks, water mains, sanitary sewers, storm drains, screening or special landscaping, or any other use involving maintenance by the Board of Commissioners shall be dedicated to public use by the subdivider on whose plat such right-of-way is established. All divisions of land along existing roadways shall dedicate half right of way for public purposes along its entire frontage in the amount as specified for the classification of the existing roadway.

(68) Roadway drainage – The runoff and drainage located within 20 feet of the edge of public and/or private roadways adjacent to, abutting, or within the boundaries of the property to be addressed in a proposed Stormwater Management submittal.

(69) Runoff – The waters derived from melting snow or rain falling within a tributary drainage basin that exceeds the infiltration capacity of the soils of that basin.

(70) Soil Erosion – The stripping of soil and weathered rock from land creating sediment for transportation by water, wind, or ice, and enabling formation of new sedimentary deposits.

(71) Storm Drain – A system of open or enclosed conduits and appurtenant structures intended to convey or manage stormwater runoff, ground water and drainage.

(72) Storm Drain System – Publicly owned facilities operated by the County by which storm water is collect and/or conveyed, including but not limited to any roads with drainage systems, streets, gutters, curbs, inlets, piped storm drains, pumping facilities, retention and detention basins, natural and human-made or altered drainage channels, reservoirs and other drainage structures which are within the County and are not part of a publicly owned treatment works as defined at 40 CFR Section 122.2

(73) Stormwater – Any surface flow, runoff, and drainage consisting entirely of water from rainstorm events.

(74) Stormwater Management Plan (SWMP) - An engineered drainage plan that effectively addresses and manages stormwater runoff and discharge.

(75) Stormwater Management Plan Approval (SWMPA) – An approval issued pursuant to this Ordinance from the Morgan County Surveyor’s Office that states all requirements of the Morgan County Stormwater Management Ordinance have been met.

(76) Stormwater Pollution Prevention Plan (SWPPP) – A plan developed to minimize the impact of stormwater pollutants resulting from construction activities.

- (77) Stormwater Quality Management Plan – A comprehensive written document that addresses stormwater runoff quality within a municipal separate storm sewer system area.
- (78) Stormwater Runoff – The runoff and drainage of precipitation resulting from rainfall or snowmelt or other natural event or process.
- (79) Stormwater Runoff Facility – The method, structure, area, system, or other equipment or measures that are designed to receive, control, store, or convey stormwater.
- (80) Stream – A river, stream, or creek which may or may not be serving as a drain, or any other waterbody that has definite banks, a bed, and visible evidence of a continued flow or continued occurrence of water.
- (81) Structural BMP – A structure designed and constructed for the purpose of stormwater quality treatment stormwater management, and flood control.
- (82) Swale – A depressed earthen designed to convey stormwater runoff with side slopes 5:1 or shallower and conveying no more than 10 cfs.
- (83) USEPA – The United States Environmental Protection Agency.
- (84) Waterbody – A river, lake, stream, creek, or other watercourse or wetlands.
- (85) Watershed – A region draining into a waterbody.
- (86) Wetlands – Areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated conditions.

3.0 Submission Requirements and Plan Approvals

Any person or landowner who develops or engages in development activities on land or a development site with land disturbance greater than or equal to 0.5 acre and subject to the provisions of this Ordinance must first obtain a Stormwater Management Plan Approval (SWMPA) from the County. A permit is obtained by first submitting a Stormwater Management Plan (SWMP) to the County, which shall include the following:

- 3.1** Complete set of plans including a title page with location and vicinity maps, existing and proposed condition plan sheets, construction details and erosion control plans all sealed by a registered professional. A plan and profile of the proposed drainage system shall be provided. Individual sheets shall be required for existing topography, proposed topography, erosion control, plan and profiles, and details. All sheets shall be 24 inches by 36 inches.
- 3.2** Mineral Extraction operations seeking a SWMPA shall submit the following additional materials with their proposed Stormwater Management Plan (SWMP): a

certified survey showing the number and proximity of residents within the adjoining area (per 312 IAC 2-3-2); a copy of the approved driveway permit with all transportation and drainage easements and right-of-ways granted by the applicant along public ways and waterways; and a reclamation plan. Any changes in a plan approved by the County must be submitted to the County and re-approved as a revision. Additional hourly review fees will be applicable to this revision review.

- 3.3 A drainage narrative describing the existing and proposed conditions and runoff patterns and complete documentation of all calculations and assumptions. This narrative shall be sealed by a registered professional engineer or licensed surveyor.
- 3.4 For projects over one (1) acre of land disturbance, a draft IDEM Notice of Intent (NOI) is required so that the County can obtain project information during review, prior to County approval and subsequent submittal of the NOI to IDEM..
- 3.5 All SWMP submittals must meet the requirements of this Ordinance and the provisions of the Stormwater Design Manual. A written narrative is required with the submittal stating that the drainage plans comply with the provisions of this Ordinance and the Morgan County Stormwater Design Manual.
- 3.6 Bond assurance made out to the Morgan County Surveyor's Office is required for an amount equal to 100% of an engineer's itemized estimate of the total costs for infrastructure installation and permanent stabilization, including the cost of roughening the ground surface, seeding with an appropriate seed mixture, and mulching.

The County may require such additional information to be included in a drainage plan that is necessary to evaluate and determine the adequacy of the proposed drainage and water quality facilities.

Once the County determines that all requirements of this Ordinance are met, a formal notice of approval (SWMPA) shall be issued by the County.

Any construction project holding a SWMPA, determined to be inconsistent with plans previously approved by the County may be subject to the articles of section 11 of this Ordinance (Enforcement). Any changes in a set of SWMP approved by the County must be submitted to the County and re-approved as a revision. Additional hourly review fees will be applicable to this revision review.

Final Inspection - Morgan County, or a designated representative, shall inspect the construction site to verify the requirements for a Notice of Termination (NOT) have been met. These requirements include stabilization of the site, removal of temporary BMPs, completion of land disturbance within the permitted boundaries, and cleanout of sediment and other pollutants from post construction BMPs. A completed copy of the inspection form confirming compliance with project termination requirements is required to be sent by the applicant to IDEM along with the NOT. The NOT shall also be submitted to Morgan County.

As-builts - As-built drawings shall be completed within 30 days after the completion of the

project and submitted to the County. Electronic record drawings shall include a pdf file of the plans completed by a professional engineer or land surveyor with changes made during construction shall be marked on the as-builts in a contrasting color in order to easily see the revisions.

Assurances/Bonding - Prior to the recording of the Final Plat any drainage infrastructure or storm water measure listed on the approved plans not installed or completed as demonstrated by certified as-built drawings will be subject to a bond assurance made out to the Morgan County Surveyor's Office. The bond assurance shall be for an amount equal to 100% of an engineer's itemized estimate of the total costs of installing and stabilizing all drainage infrastructure or storm water measure listed on the approved plans that have not been implemented or not within the tolerance of the certified as-built statement or drawings.

4.0 Detention Requirements

Detention shall be required for SWMPA for all proposed projects that disturb a half (0.5) acre or more acre of land, or disturbances of less than a half (0.5) acre of land that are part of a larger common plan of development or sale (if the larger common plan will ultimately disturb a half (0.5) or more acres of land). In addition, detention may be required for any development in areas where downstream flooding has been identified by the County.

The following projects may complete a Runoff Curve Number Worksheet per the Morgan County Stormwater Design Manual. Upon County approval, detention requirements for the project shall be waived.:

- (1) Land-disturbing activities where there will be no additional impervious surfaces associated with the final completed project
- (2) Single-family residential strip development offered for sale or lease without land improvements and the project is not part of a larger common plan of development or sale.
- (3) Individual residential building lots within a permitted project site.
- (4) Residential developments consisting of four (4) or fewer lot developments where the proposed impervious surfaces are 10% or less of the project acreage. Impervious is determined by the sum of all infrastructure (roads, paths, parking, etc.) and the average projects hard surfaces associated with all building lots within the project.
- (5) Single family residences and private ponds that are not part of a larger common plan of development or sale.

Pre- and post-developed runoff rates shall be determined using methodologies specified in the Morgan County Stormwater Design Manual.

The following requirements shall be fulfilled for all detention facilities:

- 4.1 The runoff from the developed condition peak storm with a 100-year return period storm shall be limited to the runoff rate from the pre-developed condition peak storm with a 10-year return period storm.
- 4.2 The runoff from the developed condition peak storm with a 10-year return period storm shall be limited to the runoff rate from the pre-developed condition peak storm with a 2-year return period storm.

- 4.3 There shall be no increase in the runoff rate from the pre-developed conditions to the post-developed conditions for all storms at all discharge points along the property line.
- 4.4 An adequate downstream receiving facility shall be identified on the plans and evaluated in the drainage report. There shall be no increase in erosion potential on the adjoining properties. Earthen embankments, dams, and/or berms designed and constructed to detain or impound stormwater shall be designed using criteria specified in the Morgan County Stormwater Design Manual.

5.0 Conveyance Requirements

Conveyance structures (outfalls, pipes, swales, ditches, culverts, etc.) shall be designed in accordance with the Morgan County Stormwater Design Manual to fulfill the following requirements:

- 5.1 Outfalls - All proposed pipe outfalls shall have an adequate receiving facility identified on the plans. There shall be no increase in erosion and sedimentation on adjoining properties.
- 5.2 Lift Stations – Lift stations shall not be designed as part of a stormwater conveyance system. Proposed stormwater lift stations will only be reviewed if complete documentation of no other reasonable option is provided. Stormwater lift stations will be approved on a case-by-case basis.
- 5.3 Swales – Swales shall be designed to accommodate the 10-year peak runoff within the proposed banks and the 100-year peak runoff within the drainage easement.
- 5.4 Ditches – Proposed ditches shall accommodate the 100-year runoff within the banks or a designated easement.
- 5.5 Perimeter Drain Collection – All residential development regulated by this Ordinance shall indicate on their plans an appropriately sized, common collection swale, ditch or subsurface pipe structure that provides a positive discharge, collects and effectively conveys perimeter drain discharge to an appropriate offsite outlet.
- 5.6 Pipe Systems, Inlets, Culverts, Swales, and Ditches shall be designed according to the Morgan County Stormwater Design Manual.

6.0 Emergency Access Easement Requirements

Emergency Access Easements shall be provided to Morgan County as follows:

6.1 Detention Structures

Detention structures shall have an emergency access easement around the 100-year flood elevation. This emergency access easement shall include all release control

devices. The minimum emergency access easement requirements for detention structures shall be designated in the Morgan County Stormwater Design Manual.

6.2 Conveyance Systems

An emergency access easement shall be provided for all conveyance systems that:

- (A) will be accepted by the County and/or be located adjacent to public or private roads or ways; or
- (B) lead to public conveyance systems located adjacent to public or private roads or ways; or
- (C) are maintained by a homeowner's association; or
- (D) receive off-site runoff.

The minimum emergency access easement requirements for conveyance systems shall be designated in the Morgan County Stormwater Design Manual.

The owner of the property shall be responsible for maintenance of the property's drainage facilities. The granting of an emergency access to Morgan County does not alter the property owner's duty to maintain the property's drainage facilities.

7.0 Flood Control and Management

Water bodies, roadways, structures, and other property in Morgan County are subjected to flooding. To help minimize the occurrence and impact of flooding resulting in the loss of life and / or property, the following are required:

7.1 FEMA Studied Waterways

- (A) FEMA Floodway / Floodplain Delineation – All plans submitted shall have the floodway (FW) and floodplain (FP) delineated on the grading plan(s) as scaled from the FEMA Flood Insurance Rate Maps. A reference to the panel number and date of the map shall also be included. Where no FW is delineated, the entire floodplain shall be assumed to be the FW.
- (B) 100-year Base Flood Elevation (BFE) – The 100-year BFE shall be noted on the grading plan(s). This BFE shall be determined using the Flood Insurance Study (FIS) and the appropriate plate. A note referencing the plate number and date shall be included on the plans.

7.2 Non-FEMA Studied Waterways (Greater Than 1 Square Mile Drainage Basin)

- (A) DNR Floodway / Floodplain Delineation – All plans shall have the FW and FP delineated as determined by the DNR. A note referencing the DNR determination and a copy of the DNR response letter shall be provided prior to approval by the Morgan County Drainage Board.

7.3 Basins Less Than 1 Square Mile in Area

- (A) Floodplain delineation – All waterways with drainage basins less than one (1) square mile and greater than 25 acres shall have the 100-yr BFE determined by

methods outlined in the Morgan County Stormwater Design Manual and delineated on the plans. Complete documentation of this determination shall be included with the submission.

No structures shall be located in a FEMA or DNR designated floodway. No structures shall be located within the floodplain of drainage basins less than one (1) square mile unless a floodway determination is conducted.

The lowest finished floor of all Structures located within a flood plain shall have a Three (3) feet flood protection grade (FPG) with respect to the lowest floor of the structure.

8.0 Water Quality

For new development areas that disturb 0.5 acre or more acre of land, or disturbances of less than 0.5 acre of land that are part of a larger common plan of development or sale (if the larger common plan will ultimately disturb one (1) or more acres of land), structural BMPs shall be designed to meet water quality requirements as detailed in the Morgan County Stormwater Design Manual.

Water quality BMPs are not required for the following projects:

- (1) Land-disturbing activities where there will be no additional impervious surfaces associated with the final completed project.
- (2) Single-family residential strip development offered for sale or lease without land improvements and the project is not part of a larger common plan of development or sale.
- (3) Individual residential building lots within a permitted project site.
- (4) Residential developments consisting of four (4) or fewer lot developments where the proposed impervious surfaces are 10% or less of the project acreage. Impervious is determined by the sum of all infrastructure (roads, paths, parking, etc.) and the average projects hard surfaces associated with all building lots within the project.
- (5) Single family residences and private ponds that are not part of a larger common plan of development or sale.

Water quality considerations shall be incorporated in the submitted SWMPs and specifications in accordance with the Morgan County Stormwater Design Manual to fulfill the following requirements:

8.1 Pretreatment Requirements – Every stormwater treatment practice shall have an acceptable form of water quality pretreatment, in accordance with the pretreatment requirements found in the current Morgan County Stormwater Design Manual. Stormwater infiltration practices, or practices having an infiltration component, as specified in the Morgan County Stormwater Design Manual, are prohibited, even with pretreatment, in the following circumstances:

(A) Where stormwater is generated from highly contaminated source areas as identified by the IDEM, USEPA, or the Morgan County Surveyor's Office;

(B) Where stormwater is carried in a conveyance system that also carries contaminated, non-stormwater discharges;

- (C) Where stormwater is being managed in a designated groundwater recharge or well head protection area;
- (D) Under certain geologic conditions (e.g., karst) that prohibit the proper pretreatment of stormwater.

8.2 Treatment/Geometry Conditions – All stormwater management practices shall be designed to capture and treat stormwater runoff according to the specifications outlined in the Morgan County Stormwater Design Manual. These specifications will designate the water quality treatment and water quantity criteria that apply to an approved stormwater management practices.

8.3 New retail gasoline outlets and refueling areas or those that replace their existing tank systems, regardless of size, are required to install appropriate measures to reduce lead, copper, zinc, and polycyclic aromatic hydrocarbons in storm water runoff.

8.4 Infiltration practices will not be allowed in wellhead protection areas as the primary water quality treatment measure, unless the measure is designed to treat the pollutant(s) of concern that originate in the drainage area of the measure.

8.5 Discharges from new development and redevelopment sites will not be allowed directly into karst features without pre-treatment.

8.6 Outfalls must be designed to reduce outfall scouring and bank erosion.

8.7 Detention ponds require an upstream water quality practice. Forebays are not permitted.

9.0 Soil Erosion and Sedimentation Control

Construction activities required as part of land development necessitate the removal of natural ground cover, creating the potential for erosion to occur. To minimize the movement of soil off site and its impact on water quality and on the ability of stormwater facilities to continue functioning properly, the following are required:

- 9.1** All persons who cause, in whole or in part, any earth change to occur shall provide soil erosion and sedimentation control so as to adequately reduce the potential for soil to be eroded and discharged or deposited onto adjacent properties or into a stormwater drainage system, a public street or right of way, wetland, creek, stream, waterbody, or floodplain.
- 9.2** All development shall be in accordance with all applicable federal, state and local ordinances, rules and regulations.
- 9.3** Prior to making any earth change on a development site regulated by this Ordinance, the developer shall first obtain an Erosion Control Permit or SWMPA. The developer shall install stormwater runoff facilities and shall phase the development activities so as to reduce the potential for polluted construction site stormwater runoff and off-site sedimentation.

9.4 Projects requiring SWMPA shall refer to the Morgan County Stormwater Design Manual for requirements.

9.5 Projects requiring an Erosion Control Permit shall meet the following requirements:

- (A) Submittal and approval of Erosion Control Application and fee
- (B) Submittal and approval of plan sheets and associated details showing the following:
 - (i) existing and proposed site conditions including 1 foot contours
 - (ii) stormwater conveyances
 - (iii) drainage flow arrows
 - (iv) utilities
 - (v) building footprints
 - (vi) streets, drives, and parking areas,
 - (vii) easements, rights-of-way, and property lines.
 - (viii) perimeter control measures
 - (ix) temporary construction entrance/drive and measures to minimize sediment and soil discharge and tracking
 - (x) concrete washout
 - (xi) soil stabilization measures for bare soils on site
 - (xii) soil stabilization for disturbed soils adjacent to site
 - (xiii) inlet protection
 - (xiv) stabilization measures for steep slopes

9.6 If the owner or operator is required to prepare a Stormwater Pollution Prevention Plan (SWPPP) as required by the CSGP, such plan shall be deemed to fulfill the Soil Erosion and Sedimentation Control requirements of this Section. In this case, all applicable state and federal permits or notices for land disturbing activities shall be obtained or filed prior to commencement of land disturbing activities. All applicable state or federal standards shall be adhered to when conducting land-disturbing activities. Copies of all applications, Notice of Intent submittals, plans and other erosion and sediment control related information developed for and/or submitted to state or federal authorities shall be copied to the County in addition to the SWPPP. In addition, the following shall be posted at the project site: a copy of the NOI, the NPDES permit number(s), and the location of the SWPPP.

9.7 During all construction activities on the development site, the County or their designated representative may inspect the development site to ensure compliance with the approved construction site runoff controls.

9.8 Projects equal to or greater than 0.5 acres shall submit the following for Erosion Control Permit Approval:

10.0 Enforcement

The County or their designated representative may inspect to ensure compliance with this Ordinance. In the case of non-compliance with this Ordinance or the Stormwater Design Manual, the County has the right to issue abatement orders, stop work orders, injunctions,

and/or revoke Stormwater Management Plan Approvals. The County also has the right to issue fees according to the Drainage Board Uniform Fee Schedule. Fees shall be as referenced in Ordinance 7-3-6.

10.1 The County may revoke a SWMPA where the submittal packet, plans, and/or other supporting documents reflect either:

- (A) A false statement or misrepresentation as to material fact; or
- (B) Failure to comply with the requirements of this manual.

Whenever the County discovers the existence of any of the circumstances listed below, they are empowered to issue an order requiring the suspension of the land alteration. The stop-work order shall be in writing and shall state to what land alteration it is applicable and the reason for its issuance. One (1) copy of the stop-work order shall be posted on the property in a conspicuous place and one (1) copy shall be delivered to the applicant, and if conveniently possible to the person doing the land alteration and to the owner of the property or his agent. The stop work order shall state the conditions under which land alteration may be resumed. A stop-work order shall be issued if:

- (A) 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
- (B) Land alteration has been accomplished in violation of a drainage requirement and fifteen (15) calendar days has elapsed since written notice of the violation or noncompliance was either posted on the property in a conspicuous place or given to the person doing the land alteration, without the violation or noncompliance being corrected; or
- (C) Land alteration for which a SWMPA is required is proceeding without a SWMPA being in force. In such an instance the stop-work order shall indicate that the effect of the order terminates when the required SWMPA is obtained.