

**STORMWATER MANAGEMENT  
ORDINANCE  
OF MANHEIM TOWNSHIP 2014**



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**May 27, 2014, as amended**

# STORMWATER MANAGEMENT

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# **STORMWATER MANAGEMENT ORDINANCE OF MANHEIM TOWNSHIP**

**AN ORDINANCE ESTABLISHING RULES, REGULATIONS AND STANDARDS, GOVERNING STORMWATER MANAGEMENT WITHIN THE TOWNSHIP OF MANHEIM, SETTING FORTH THE PROCEDURES TO BE FOLLOWED BY THE OFFICIALS OF THE TOWNSHIP IN APPLYING AND ADMINISTERING THESE RULES, REGULATIONS AND STANDARDS AND PROVIDING PENALTIES FOR THE VIOLATION THEREOF.**

**BE AND HEREBY ORDAINED AND ENACTED** by the COMMISSIONERS of Manheim TOWNSHIP, Lancaster County, Pennsylvania as follows:

## **ARTICLE I. GENERAL PROVISIONS**

### **SECTION 101. STATUTORY AUTHORITY**

The COMMISSIONERS of Manheim Township are empowered to regulate these activities by the authority of the Act of October 4, 1978, P.L. 864 (Act 167), 32 P.S. § 680.1, et. seq., as amended, the "Stormwater Management Act", Act 394 of 1937, as amended, 35 P.S. § 691.1 et. seq. the Pennsylvania Clean Streams Law, 53 P.S. § 55101 et. seq., and the First Class Township Code. The TOWNSHIP is also empowered to regulate land use activities that affect RUNOFF by the authority of the Act of July 31, 1968, P.L. 805, No. 247, The Pennsylvania MUNICIPALITIES PLANNING CODE (MPC), as amended.

### **SECTION 102. TITLE**

This ORDINANCE shall be known and may be cited as "The Stormwater Management Ordinance of Manheim Township."

### **SECTION 103. STATEMENT OF FINDINGS**

The COMMISSIONERS of Manheim Township find that:

1. *Inadequate* management of accelerated STORMWATER RUNOFF resulting from DEVELOPMENT throughout a WATERSHED increases FLOOD flows and velocities, contributes to EROSION and SEDIMENTATION, overtaxes the carrying capacity of existing streams and STORM SEWERS, greatly increases the cost of public facilities to convey and manage STORMWATER, undermines FLOODPLAIN management and FLOOD control efforts in downstream communities, reduces GROUNDWATER RECHARGE, threatens public health and safety, and increases NONPOINT SOURCE POLLUTION of water resources.

2. A comprehensive program of STORMWATER MANAGEMENT, including reasonable regulation of DEVELOPMENT and activities causing accelerated RUNOFF, is fundamental to the public health, safety, welfare, and the protection of the people of the TOWNSHIP and all the people of the Commonwealth, their resources, and the environment.
3. STORMWATER is an important water resource, which provides GROUNDWATER RECHARGE for water supplies and base flow of streams, which also protects and maintains surface water quality.
4. The TOWNSHIP is required by federal and state regulations to implement a program of STORMWATER controls. The TOWNSHIP is required to obtain a permit for STORMWATER discharges for their MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) under the National Pollutant Discharge Elimination System (NPDES).
5. RIPARIAN BUFFERS and RIPARIAN FOREST BUFFERS enhance water quality by filtering pollutants in RUNOFF, providing light control and temperature moderation, processing pollutants, increasing infiltration and providing CHANNEL and shoreline stability thus decreasing EROSION. (Refer to PADEP Riparian Forest Buffer Guidance, November 27, 2010 or latest edition)

#### **SECTION 104. PURPOSE**

The purpose of this ORDINANCE is to promote health, safety, and welfare by minimizing the harms and maximizing the benefits described in Section 103 of this ORDINANCE through provisions designed to:

1. Meet legal water quality requirements under state law, including regulations of 25 Pa. Code Chapter 93 to protect, maintain, reclaim, and restore the existing and designated uses of the WATERS OF THE COMMONWEALTH.
2. Control and manage accelerated RUNOFF and EROSION and SEDIMENTATION problems at their source by regulating activities which cause such problems.
3. Utilize, preserve, and improve the desirable existing NATURAL DRAINAGE systems within the TOWNSHIP.
4. Provide procedures and performance standards for STORMWATER planning and management.
5. Maintain GROUNDWATER RECHARGE to prevent degradation of surface and groundwater quality and to otherwise protect water resources.
6. Preserve and restore the FLOOD carrying capacity of WATERCOURSES.
7. Prevent scouring and EROSION of stream banks and streambeds.
8. Provide for proper maintenance of all permanent STORMWATER MANAGEMENT FACILITIES which are constructed in the TOWNSHIP. Ensure proper Operation and Maintenance Agreements are in place for all STORMWATER BEST MANAGEMENT PRACTICES (BMPs) that are implemented within the TOWNSHIP.

9. Maintain the existing flows and quality of WATERCOURSEs in the TOWNSHIP and the Commonwealth.
10. In the interest of public health, safety, and welfare, the regulations of this ORDINANCE are designed and intended to protect FLOODPLAIN areas subject to and necessary for FLOOD waters, to permit and encourage the retention of open land uses so located and utilized, and to guide incompatible DEVELOPMENT into more appropriate zoning districts.
11. Provide standards to meet NPDES permit requirements.
12. Promote STORMWATER RUNOFF prevention through the use of NON-STRUCTURAL BMPS.
13. Provide a regulatory environment that supports the proportion, density and intensity of DEVELOPMENT called for in the comprehensive plan; allow for creative methods of improving water quality and managing STORMWATER RUNOFF; and promote a regional approach to water resource management.
14. Help preserve and protect exceptional natural resources, and conserve and restore natural resource systems including but not limited to native plant communities including those within RIPARIAN BUFFERS and RIPARIAN FOREST BUFFERS.
15. Promote STORMWATER MANAGEMENT practices that emphasize infiltration, evaporation, and transpiration.
16. Minimize thermal impacts to WATERS OF THE COMMONWEALTH.
17. Disconnect IMPERVIOUS SURFACEs by directing RUNOFF to pervious AREAs, wherever possible.
18. To regulate uses, activities, and DEVELOPMENT which, acting alone or in combination with other existing or future uses, activities, and DEVELOPMENT, will cause unacceptable increases in FLOOD heights, velocities and frequencies.

#### **SECTION 105. APPLICABILITY**

The provisions, regulations, limitations, and restrictions of this ORDINANCE shall apply to the following REGULATED ACTIVITIES:

1. DEVELOPMENT of any kind where a preliminary or final subdivision or a land DEVELOPMENT PLAN is required by The Subdivision and Land Development Ordinance of Manheim Township, or
2. Removal of ground cover, grading, FILLING or excavation on a property; greater than 5,000 square feet, or
3. CONSTRUCTION of new or additional IMPERVIOUS SURFACEs (driveways, PARKING LOTs, etc.), and associated IMPROVEMENTS, or

4. CONSTRUCTION of new buildings or additions to existing buildings, or
5. Installation or ALTERATION of STORMWATER MANAGEMENT FACILITIES and appurtenances thereto, or
6. Diversion or piping of any natural or man-made stream CHANNEL, or
7. Any other REGULATED ACTIVITIES where the TOWNSHIP determines that said activities may affect any existing WATERCOURSE's STORMWATER MANAGEMENT FACILITIES, or STORMWATER drainage patterns.

**SECTION 106. DUTY OF PERSONS ENGAGED IN THE DEVELOPMENT OF LAND**

1. Notwithstanding any provision(s) of this ORDINANCE, including exemptions and impervious credits, any landowner or any person engaged in the ALTERATION or DEVELOPMENT of land which may affect STORMWATER RUNOFF characteristics shall implement such measures as are reasonably necessary to protect other property. Such measures also shall include actions as are required to manage the rate, volume, direction, and quality of resulting STORMWATER RUNOFF in a manner which otherwise adequately protects health, property, and water quality.
2. STORMWATER MANAGEMENT PLANS approved by the TOWNSHIP shall be onsite throughout the duration of the REGULATED ACTIVITY.

**SECTION 107. STORMWATER MANAGEMENT CRITERIA**

All STORMWATER MANAGEMENT PLANS shall include the following components:

1. VOLUME CONTROL. VOLUME CONTROL BMPs are intended to maintain existing hydrologic conditions for SMALL STORM EVENTS by promoting GROUNDWATER RECHARGE and/or evapotranspiration as described in this ORDINANCE. RUNOFF VOLUME CONTROLS shall be implemented using the *Design Storm Method* described in Section 402.2.A, or through continuous modeling approaches or other means as described in the BMP MANUAL.
2. RUNOFF Rate Control. Rate control for large storms, up to and including the One-Hundred (100) Year STORM EVENT, is essential to protect against immediate downstream EROSION and FLOODING. If, after DEVELOPMENT, the pre-DEVELOPMENT hydrograph cannot be matched using infiltration, a reduction in the post-Developed peak flow will be required. Post-DEVELOPMENT peak flows shall not exceed fifty (50) percent of the pre-DEVELOPMENT peak flows for the two, five, ten, twenty-five, fifty, and One-Hundred (100) Year STORM EVENTS. (See Section 402.3.)
3. RIPARIAN BUFFERS or RIPARIAN FORESTED BUFFERS. In order to protect and improve water quality, a protected RIPARIAN BUFFER or RIPARIAN FORESTED BUFFER shall be created. (See Section 403.7.)
4. The TOWNSHIP may require additional STORMWATER control measures for STORMWATER discharges to special management AREAs including but not limited to:
  - A. Waterbodies listed as “impaired” on Pennsylvania’s CLEAN WATER ACT 303(d)/305(b) Integrated List.

- B. Any waterbody or WATERSHED with an approved Total Maximum Daily Load (TMDL).
- C. Critical AREAs with sensitive resources including but not limited to state designated special protection waters, cold water fisheries, carbonate or other GROUNDWATER RECHARGE AREAs highly vulnerable to contamination, drainage AREAs to water supply reservoirs and source water protection zones.

**SECTION 108. ACCEPTABLE BEST MANAGEMENT PRACTICES (BMPS) FOR THE DETENTION AND CONTROL OF STORMWATER RUNOFF**

Various combinations of methods should be tailored to suit the particular requirements of the type of DEVELOPMENT and the topographic features of the PROJECT SITE and shall be designed in accordance with the latest BMP MANUAL.

**SECTION 109. STORMWATER IMPERVIOUS CREDIT AND EXEMPTIONS**

Any REGULATED ACTIVITY that meets the impervious credit or exemption criteria below is exempt from the STORMWATER MANAGEMENT PLAN preparation provisions of this ORDINANCE. These criteria shall apply to the total DEVELOPMENT even if DEVELOPMENT is to take place in phases. The square foot impervious credit is attributable to the existing parent tract in existence at the time of enactment of the previously adopted Stormwater Management Ordinance, December 14, 1998 where impervious credits were first applied. The impervious AREA computations shall be cumulatively considered. STORMWATER impervious credit shall not relieve the APPLICANT from providing adequate STORMWATER MANAGEMENT to meet the intent of Section 104 of this ORDINANCE. The following activities are specifically exempt from the plan requirements of this ORDINANCE.

- 1. AGRICULTURAL ZONE. The following criteria shall apply to all existing LOTs in the Agricultural\* Zone (1 LOT per 20 acres or larger).

<b>Total Parcel Size (acres)</b>	<b>Minimum Distance **(feet)</b>	<b>Impervious AREAs Exempt from ORDINACE</b>
0 to 1	50	1,000
>1 to 3	100	3,000
>3 to 5	250	6,000
>5	500	10,000

**NOTES:**

\* All farms for which a STORMWATER impervious credit is requested shall have a CONSERVATION PLAN and a Nutrient Management Plan on file with and approved by the appropriate officials.

\*\* The minimum distance between the proposed impervious AREA and/or STORMWATER controls/structure discharge point to the down slope property line. In lieu



of meeting the minimum distance criteria, the APPLICANT may provide documentation from a professional registered in the Commonwealth of Pennsylvania that the increased flows from the site leaves the site in the same manner as the pre-DEVELOPMENT condition and that there will be no adverse effects to adjacent property, or the increased flows reach a NATURAL DRAINAGEWAY or existing STORMWATER MANAGEMENT structure before affecting the adjacent property.

1. Lands improved with existing residential structures shall be credited for an additional 1,000 square feet of IMPERVIOUS SURFACE in all zoning districts other than the Agricultural zoning district provided the following conditions are met:
  - A. Flows from the PROJECT SITE after DEVELOPMENT leave the PROJECT SITE in the same manner as pre-DEVELOPMENT conditions.
  - B. Flows from the PROJECT SITE after DEVELOPMENT do not adversely affect any existing STORMWATER MANAGEMENT FACILITY located on the PROJECT SITE.
  - C. The 1,000 square foot impervious credit is attributable to the existing parent tract in existence at the time of enactment of the previously adopted Stormwater Management Ordinance, December 14, 1998 where impervious credits were first applied. The impervious AREA computations shall be cumulatively considered.
2. Lands improved with existing nonresidential structures shall be credited for an additional 500 square feet of IMPERVIOUS SURFACE in all zoning districts other than the Agricultural zoning district provided the following conditions are met:
  - A. Flows from the PROJECT SITE after DEVELOPMENT leave the PROJECT SITE in the same manner as pre-DEVELOPMENT conditions.
  - B. Flows from the PROJECT SITE after DEVELOPMENT do not adversely affect any existing STORMWATER MANAGEMENT FACILITY located on the PROJECT SITE.
  - C. The 500 square foot impervious credit is attributable to the existing parent tract in existence at the time of enactment of the previously adopted Stormwater Management Ordinance, December 14, 1998 where impervious credits were first applied. The impervious AREA computations shall be cumulatively considered.
4. AGRICULTURAL ACTIVITIES when operated in accordance with a CONSERVATION PLAN or EROSION AND SEDIMENT POLLUTION CONTROL PLAN found adequate by the CONSERVATION DISTRICT in accordance with 25 Pa. Code CHAPTER 102. AGRICULTURAL ACTIVITIES such as growing crops, rotating crops, tilling of soil and grazing animals and other such activities are specifically exempt from complying with the requirements of this ORDINANCE.
5. FOREST MANAGEMENT and TIMBER OPERATIONS which are following the PADEP management practices contained in its publication "Soil Erosion and Sedimentation Control Guidelines for Forestry", are operating under an and in accordance with 25 Pa. Code CHAPTER 102 are exempt from complying with the requirements of this ORDINANCE.

6. TOWNSHIP capital improvement projects are exempt from complying with the requirements of this ORDINANCE.
7. Use of land for gardening on the property; less than 5,000 square feet of EARTH DISTURBANCE on the property, are exempt from complying with the requirements of this ORDINANCE.
8. Removal of ground cover, grading, FILLING or excavation on the property; less than 5,000 square feet on the property, are exempt from complying with the requirements of this ORDINANCE.
9. The TOWNSHIP may deny or revoke any impervious credit or exemption pursuant to this Section at any time for any project that the TOWNSHIP believes may pose a threat to public health, safety, property or the environment.
10. No APPLICANT and no activity is exempt from complying with any state or federal requirements applicable if the subject property is located in a High Quality (HQ) or Exceptional Value (EV) WATERSHED.

#### **SECTION 110. REGIONAL STORMWATER MANAGEMENT PLAN**

APPLICANTS have the option to propose a REGIONAL STORMWATER MANAGEMENT PLAN or participate in a REGIONAL STORMWATER MANAGEMENT PLAN developed by others. A REGIONAL STORMWATER MANAGEMENT PLAN may include offsite volume and rate control, as appropriate and supported by a detailed design approved by the TOWNSHIP. A REGIONAL STORMWATER MANAGEMENT PLAN must meet all of the VOLUME CONTROL and rate control standards required by this ORDINANCE for the AREA defined by the REGIONAL STORMWATER MANAGEMENT PLAN, but not necessarily for each individual DEVELOPMENT Site. Appropriate agreements must be established to ensure the requirements of this ORDINANCE and the requirements of the REGIONAL STORMWATER MANAGEMENT PLAN are met.

#### **SECTION 111. COMPATIBILITY WITH OTHER PERMIT AND ORDINANCE REQUIREMENTS**

In the interpretation and application of the provisions of this ORDINANCE, said provisions shall be deemed to be the minimum requirements necessary for the promotion and protection of health, safety and welfare. Approvals issued pursuant to this ORDINANCE do not relieve the APPLICANT of the responsibility to secure required permits or approvals for activities regulated by any other applicable code, rule, act or ordinance. If more stringent requirements concerning regulation of STORMWATER or Erosion and sedimentation control are contained in these permits or approvals, the more stringent regulation shall apply.

## **ARTICLE II. TERMINOLOGY**

### **SECTION 201. WORD USAGE**

Unless otherwise stated, the following words and phrases shall be interpreted and construed throughout this ORDINANCE to have the meaning herein indicated. Terms not herein defined which are defined in The Subdivision and Land Development Ordinance of Manheim Township, The Zoning Ordinance of Manheim Township, or The Floodplain Ordinance of Manheim Township shall have the meanings assigned in such ordinance. The following rules of CONSTRUCTION and interpretation shall be used in this ORDINANCE.

1. Words in the present tense may imply the future tense.
2. Words used in singular imply the plural, and the plural shall include the singular.
3. The masculine gender includes the feminine and the neuter genders. The feminine gender shall include the masculine and neuter. The neuter gender shall include the masculine and feminine.
4. The word "person" includes a partnership, firm, association, corporation, organization, trust, estate, company, joint venture or any other legally recognized entity as well as an individual and the officers of any corporation and the members of any partnership and shall include both singular and plural.
5. The word "LOT" includes the words "plot", "Tract", and "Parcel".
6. The words "shall", "must" and "will" are mandatory; the word "may" and "should" are discretionary.
7. The words "includes" or "including" shall not limit the term to the specific example but is intended to extend its meaning to all other instances of like kind and character.
8. The words "used or occupied" include the words "intended, designed, maintained, or arranged to be used or occupied."
9. The time, within which any act required by this ORDINANCE is to be performed, shall be computed by excluding the first day and including the last day. However, if the last day is a Saturday or Sunday or a holiday declared by the United States Congress or the Pennsylvania General Assembly, it shall also be excluded. The word "day" shall mean a calendar day, unless otherwise indicated.
10. Terms not defined in this ORDINANCE, in such other ordinances, or in § 107 of the MPC shall have the meaning customarily assigned to them as found in the most recent edition of Merriam-Webster's Collegiate Dictionary.
11. References to officially adopted regulations, standards, or publications of the PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION (PADEP) or other governmental agencies shall include the regulation, publication, or standard in effect on the date when a STORMWATER MANAGEMENT PLAN is first filed. It is the intent of the TOWNSHIP in enacting this Section to incorporate such changes to statutes,

regulations, and publications to the extent authorized by 1 Pa. C.S. § 1937.

## **SECTION 202. DEFINITIONS**

As used in this ORDINANCE, the following terms shall have the meanings indicated:

**ACCELERATED EROSION** - The removal of the surface of the land through the combined action of man's activities and natural processes at a rate greater than would occur because of the natural processes alone.

**ACCESS EASEMENT** - A right granted by a landowner to a grantee, allowing entry for the purpose of inspecting, maintaining and repairing **STORMWATER MANAGEMENT FACILITIES**.

**ACT 167 PLAN** - The plan for managing **STORMWATER RUNOFF** and prepared under the authority of the Pennsylvania's Stormwater Management Act of October 4, 1978.

**AGRICULTURAL ACTIVITY** - Activities associated with **AGRICULTURE** such as Agricultural cultivation, Agricultural operation, and **ANIMAL HEAVY USE AREAS**. This includes the work of producing crops including tillage, land clearing, plowing, disking, harrowing, planting, harvesting crops, or pasturing and raising of livestock and installation of **CONSERVATION PRACTICES**. **CONSTRUCTION** of new buildings or impervious **AREAs** is not considered an **AGRICULTURAL ACTIVITY**.

**AGRICULTURE** - The tilling of the soil, the raising of crops, forestry, horticulture, and gardening, including the keeping or raising of livestock and including the sale of crops and agricultural, dairy and horticultural farm products incidental to the operation of a farm.

**AGRICULTURAL ZONE** - The Agricultural zoning district as defined by The Zoning Ordinance of Manheim Township.

**ALTERATION** - As applied to land, a change in topography as a result of the moving of soil and rock from one location or position to another; also the changing of surface conditions by causing the surface to be more or less impervious; **EARTH DISTURBANCE ACTIVITY**.

**ANIMAL HEAVY USE AREAS** - A barnyard, feedlot, loafing **AREA**, exercise **LOT**, or other similar **AREA** on an Agricultural operation where due to the concentration of animals, it is not possible to establish and maintain vegetative cover of a density capable of minimizing **ACCELERATED EROSION** and **SEDIMENTATION** by usual planting methods. The term does not include entrances, pathways and walkways between **AREAs** where animals are housed or kept in concentration.

**APPLICANT** - A landowner, developer, or other person who has filed an application to the **TOWNSHIP** for approval to engage in any **REGULATED ACTIVITY** at a **PROJECT SITE** in the **TOWNSHIP**.

**AREA** - The extent of surface contained within the boundaries or extremities of land or building.

**BEST MANAGEMENT PRACTICE (BMP)** - Activities, facilities, control measures, planning or procedures used to minimize **ACCELERATED EROSION** and **SEDIMENTATION** and manage **STORMWATER** to protect, maintain, reclaim, and restore the quality of waters and the

existing and designated uses of WATERS OF THE COMMONWEALTH before, during and after EARTH DISTURBANCE ACTIVITIES. See also NON-STRUCTURAL BMP and STRUCTURAL BMP.

BMP MANUAL - The Pennsylvania STORMWATER Best Management Practices Manual of December 2006, or most recent version thereof.

BRIDGE - A structure including supports erected over a depression or an OBSTRUCTION, such as water, highway, or railway, and having a track or passageway for carrying traffic or other moving loads, and having an opening measured along the center of the roadway of more than twenty (20) feet between undercoping of abutments or spring lines of arches, or extreme ends of openings for multiple boxes; it may also include multiple PIPES, where the clear distance between openings is less than half of the smaller contiguous opening.

CARBONATE GEOLOGY - Limestone or dolomite bedrock. CARBONATE GEOLOGY is often associated with KARST topography.

CHANNEL - A natural or artificial WATERCOURSE with a definite bed and banks which confine and conduct continuously or periodically flowing water.

CHAPTER 102 - Chapter 102 Erosion and Sediment Control of the regulations of PADEP, 25 Pa. Code Sect. 102.1 et seq.

CHAPTER 105 - Chapter 105 Dam Safety and Waterway Management of the regulations of PADEP, 25 Pa. Code Sect. 105.1 et seq.

CHAPTER 106 - Chapter 106 FLOODPLAIN Management of the regulations of PADEP, 25 Pa. Code Sect. 106.1 et seq.

CISTERN - A reservoir or tank for storing rainwater.

CLEAN WATER ACT – The Federal Water Pollution Control Act, as amended, 33 U.S. C.A. §§ 1251-1387.

COMMISSIONERS - The Board of Commissioners of the Township of Manheim, Lancaster County, Pennsylvania.

CONCRETE CHANNEL - A Concrete CHANNEL with a definite bed and banks which confine and conduct continuously or periodically flowing water.

CONSERVATION DISTRICT - The Lancaster County Conservation District.

CONSERVATION PLAN - A plan written by a Natural Resources Conservation Service (NRCS) certified planner or approved by the CONSERVATION DISTRICT identifying CONSERVATION PRACTICES and including site specific BMPs for agricultural plowing or tilling activities and ANIMAL HEAVY USE AREAS.

CONSERVATION PRACTICES - Practices installed on Agricultural lands to improve farmland, soil and/or water quality which have been identified in a current CONSERVATION PLAN.

CONSTRUCTION - The CONSTRUCTION, reconstruction, renovation, repair, extension,

expansion, ALTERATION, or relocation of a building or structure, including the placement of mobilehomes.

CONVEYANCE - Facilities that carry a flow or have the ability of a PIPE, CULVERT, BRIDGE, SWALE or similar facility to carry the peak flow from the DESIGN STORM.

CULVERT - An enclosed water carrying structure of one or more openings having a combined span including spacing between openings equal to or less than twenty (20) feet.

DECLORINATED WATER - Water that when tested contains less than 0.1 mg/L of free chlorine.

DESIGN STORM - The magnitude and temporal distribution of precipitation from a STORM EVENT measured in probability of occurrence (e.g., fifty year STORM EVENT) and duration (e.g., twenty-four hour), and used in the design and computation of the STORMWATER MANAGEMENT control systems.

DESIGNEE - An agent of the TOWNSHIP involved with the administration, review or enforcement of any provisions of this ORDINANCE by appointment, contract or Memorandum of Understanding.

DETENTION BASIN - An impoundment structure designed to manage STORMWATER RUNOFF by temporarily storing the RUNOFF and releasing it at a predetermined rate to a completely drained condition.

DEVELOPMENT - Any man-made change to improved or unimproved real estate, including but not limited to, buildings or other structures, mining, dredging, FILLING, grading, paving, excavation, or drilling operations

DEVELOPMENT PLAN - The provisions for DEVELOPMENT, including a planned residential DEVELOPMENT, a plat of subdivision, all covenants relating to use, location and bulk of buildings and other structures, intensity of use or density of DEVELOPMENT, streets, ways and parking facilities, common OPEN SPACE and public facilities.

DISAPPEARING STREAM - A stream in an AREA underlain by limestone or dolomite that flows underground for a portion of its length.

DISTURBED AREA - Any land AREA where an EARTH DISTURBANCE ACTIVITY is occurring or has occurred. This includes REDEVELOPMENT and demolition.

DRAINAGE EASEMENT - A right granted by a landowner to a grantee, allowing the use of land for STORMWATER MANAGEMENT purposes.

EARTH DISTURBANCE ACTIVITY- Any CONSTRUCTION or other human activity which disturbs the surface of land, including, but not limited to: clearing and grubbing; grading; excavations; embankments; land DEVELOPMENT; Agricultural plowing or tilling; operation of ANIMAL HEAVY USE AREAS; timber harvesting activities; road maintenance activities; oil and gas activities; well drilling; mineral extraction; building CONSTRUCTION; and the moving, depositing, stockpiling, or storing of soil, rock, or earth materials and building demolition.

**ENGINEER** - A professional ENGINEER registered in the Commonwealth of Pennsylvania.

**EPHEMERAL STREAM** - A transient stream, one that flows for a relatively short time.

**EROSION** - The natural process by which the surface of the land is worn away by water, wind, or chemical action.

**EROSION AND SEDIMENT POLLUTION CONTROL PLAN (E&S Plan)** - A project specific plan consisting of both drawings and a narrative that identifies BMPs to minimize ACCELERATED EROSION and SEDIMENTATION before, during and after EARTH DISTURBANCE ACTIVITIES.

**EXISTING CONDITIONS** - The pre-DEVELOPMENT dominant land cover during the five (5) year period immediately preceding a proposed REGULATED ACTIVITY, which would have produced the least RUNOFF volume.

**FEMA** - The United States Federal Emergency Management Agency or any agency successor to FEMA.

**FILL** - Material placed or deposited so as to form an embankment or raise the surface elevation of the land, including but not limited to levees, bulkheads, dikes, jetties, embankments, and causeways.

**FINANCIAL SECURITY** - Security posted by an APPLICANT in accordance with Article V of the MPC, and Article V of this ORDINANCE, by which a APPLICANT assures the CONSTRUCTION of IMPROVEMENTS required by this ORDINANCE.

**FLOOD** - A general and temporary condition of partial or complete inundation of normally dry land AREAS from the overland flow of a WATERCOURSE or other body of surface water, or from the unusual and rapid accumulation or RUNOFF of surface waters from any source.

**FLOODPLAIN** – An AREA of land adjacent to the CHANNEL of a WATERCOURSE which has been or is likely to be FLOODED, or any AREA subject to the unusual and rapid accumulation or RUNOFF of surface waters from any source, as defined by FEMA or in accordance with Section 301.2 of the Manheim Township Floodplain Ordinance.

**FLOODPLAIN MANAGEMENT ACT** - Act of October 4, 1978, P.L. 851, No. 166, as amended 32 P.S. Section 679.101 et seq., and as may be amended in the future.

**FLOODWAY** - The designated AREA of a FLOODPLAIN required to carry and discharge FLOOD waters of a given magnitude. For the purposes of this ORDINANCE, the FLOODWAY shall equal the ONE-HUNDRED (100) YEAR FLOODPLAIN boundary.

**FLOOR AREA** - The maximum amount of usable space within a building.

**FOREST MANAGEMENT/TIMBER OPERATIONS** - Planning and activities necessary for the management of forest land. These include conducting a timber inventory and preparation of forest management plans, silvicultural treatment, cutting budgets, logging road design and CONSTRUCTION, timber harvesting, site preparation and reforestation.

**FREQUENCY** - The probability or chance that a given STORM EVENT/FLOOD will be

equaled or exceeded in a given year.

**GEOLOGIST** - An individual licensed and registered under the laws of the Commonwealth of Pennsylvania to engage in the practice of geology.

**GRADE** - A reference plane representing the average of finished ground level adjoining the building at all exterior walls. When the finished ground level slopes away from the exterior walls, the reference plane shall be established by the lowest points within the AREA between the building and the LOT line or, when the LOT line is more than six (6) feet from the building, between the building and a point six (6) feet from the building. Also, the slope of a road, CHANNEL or natural ground specified in percent and shown on plans as specified herein.

**GROUNDWATER RECHARGE** - The process by which water from above the ground surface is added to the saturated zone of an aquifer, either directly or indirectly.

**HYDROLOGIC SOIL GROUP (HSG)** - Infiltration rates of soils vary widely and are affected by subsurface permeability as well as surface intake rates. Soils are classified into four HSGs (A, B, C and D) according to their minimum infiltration rate, which is obtained for bare soil after prolonged wetting. The NRCS defines the four groups and provides a list of most of the soils in the United States and their group classification. The soils in the AREA of the PROJECT SITE may be identified from a soil survey report that can be obtained from local NRCS offices or CONSERVATION DISTRICT offices. Soils become less pervious as the HSG varies from A through D.

**IMPERVIOUS SURFACE** - Any material that covers the land which inhibits the percolation of STORMWATER directly into the soil including, but not limited to, buildings, pavement and stone AREAs.

**IMPROVEMENTS** - Physical changes to the land, including, but not limited to buildings/structures, grading, paving, curbs, gutters, STORM SEWERS and drains, IMPROVEMENTS to existing WATERCOURSES, sidewalks, streets, signs, monuments, water supply facilities and sewage disposal facilities.

**INFILTRATION FACILITIES** - A facility designed to direct RUNOFF into the ground including but not limited to french drains, seepage pits, seepage trench, rain gardens, vegetated SWALES, porous asphalt, pervious concrete, and infiltration basins.

**INLET** - A surface connection to a closed drain. The upstream end of any structure through which water may flow.

**INTERMITTENT WATERCOURSE** - A natural flow of water existing for a relatively long time, but for weeks or months of the year is below the local water table and obtains its flow from both surface RUNOFF and groundwater discharges.

**INVASIVE VEGETATION** - Plants which grow quickly and aggressively, spreading, and displacing other plants. Invasive species typically are introduced into a region far from their native habitat. See [Invasive Plants in Pennsylvania](#) by the Department of Conservation and Natural Resources.



**KARST** - A type of topography or landscape characterized by features including but not limited to surface depressions, sinkholes, rock pinnacles, uneven bedrock surface, underground drainage, and caves. **KARST** is formed on carbonate rocks, such as limestone or dolomite.

**LIMITING ZONE** - A rock formation, other stratum, or soil condition which is so slowly permeable that it effectively limits downward passage of **STORMWATER**. Seasonal high water tables, whether perched or regional also constitute a **LIMITING ZONE**.

**LINEAMENT** - A linear feature in a landscape which is an expression of an underlying geological structure such as a fault.

**LOT** - A parcel of land held in single and separate ownership, occupied or capable of being occupied by buildings, structures, accessory buildings or structures, signs, and uses customarily incidental to it, including such **OPEN SPACES** as are required, and which is described by reference to a recorded plat or by metes and bounds.

**LOT AREA** - The **AREA** contained within the property lines of the individual parcel of land.

**LOT SIZE** - The required **AREA** of a **LOT**.

**MANHEIM TOWNSHIP IMPROVEMENTS SPECIFICATIONS MANUAL (MTISM)** - The Manheim Township Improvements Specifications Manual as may be modified by resolution from time to time.

**MANHEIM TOWNSHIP STORMWATER MANAGEMENT REFERENCE MANUAL (MTSMRM)** - The Manheim Township Stormwater Management Reference Manual as may be modified by resolution from time to time.

**MANNING EQUATION (MANNING FORMULA)** - An equation for calculation of velocity of flow (e.g. feet per second) and flow rate (e.g. cubic feet per second) in **OPEN CHANNELS** based upon **CHANNEL** shape, roughness, depth of flow and slope. **OPEN CHANNELS** may include closed conduits so long as the flow is not under pressure as the **MANNING'S EQUATION** assumes steady, gradually varied flow.

**MODIFICATION** - A change, **ALTERATION** or amendment which introduces new elements into the details, or cancels some of them, but leaves the general purpose and effect of the subject matter intact.

**MUNICIPAL SEPARATE STORM SEWER** - 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 all of the following: (1) owned or operated by a state, city, town, borough, township, county, district, association or other public body (created under state law) having jurisdiction over disposal of sewage, industrial wastes, **STORMWATER** or other wastes; (2) designed or used for collecting or conveying **STORMWATER**; (3) not a combined sewer; and (4) not part of a Publicly Owned Treatment Works as defined at 40 CFR § 122.2.

**MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4)** - All separate **STORM SEWERS** that are defined as "large" or "medium" or "small" **MUNICIPAL SEPARATE STORM SEWER SYSTEMS** pursuant to 40 CFR §§ 122.26(b)(18), or designated as regulated under 40 CFR §

122.26(a)(1)(v).

**MUNICIPALITIES PLANNING CODE (MPC)** - The Pennsylvania Municipalities Planning Code, Act of July 31, 1968, P.L. 805, No. 247, as amended and reenacted, 53 P.S. § 10101 et seq.

**NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES)** - A permit issued under 25 Pa. Code Chapter 92a (relating to National Pollutant Discharge Elimination System permitting, monitoring and compliance) for the discharge or potential discharge of pollutants from a **POINT SOURCE** to surface waters.

**NATIVE VEGETATION** - Plant species that have evolved or are indigenous to a specific geographical **AREA**. These plants are adapted to local soil and weather conditions as well as pests and diseases.

**NATURAL DRAINAGEWAY** - An existing **CHANNEL** for water **RUNOFF** that was formed by natural processes.

**NATURAL GROUND COVER** - Ground cover which mimics the infiltration characteristics of predominant **HYDROLOGIC SOIL GROUP** found at the site.

**NATURAL RESOURCE CONSERVATION SERVICE (NRCS)** - The Natural Resource Conservation Service, previously Soil Conservation Service, or SCS or any agency successor to the Natural Resource Conservation Service.

**NONPOINT SOURCE POLLUTION** - Any source of water pollution that does not meet the legal definition of **POINT SOURCE** in §502(14) of the **CLEAN WATER ACT**.

**NON-STRUCTURAL BMPS** - Planning and design approaches, operational and/or behavior-related practices which minimize the contact of pollutants with **STORMWATER RUNOFF**.

**OBSTRUCTION** - Any dam, wall, wharf, embankment, levee, dike, pile, abutment, projection, refuse, **FILL**, structure, or other matter in, along, across or projecting into any **CHANNEL**, **WATERCOURSE**, or **FLOODPLAIN**, which may impede, retard, or change the direction of the flow of water, or that is placed where the flow of water might carry the same downstream to cause damage to life or property.

**ONE-HUNDRED (100) YEAR FLOOD** - A **FLOOD** which is likely to be equaled or exceeded once every One-Hundred (100) Years (i.e. that has a one-percent chance of being equaled or exceeded in any given year).

**ONE-HUNDRED (100) YEAR FLOODPLAIN** - Any land **AREA** susceptible to a general and temporary condition of partial or complete inundation by the **ONE-HUNDRED (100) YEAR FLOOD** due to overflow of inland waters, or to the unusual and rapid accumulation or **RUNOFF** of surface waters from any source.

**OPEN CHANNEL** - A drainage element in which **STORMWATER** flows with an open surface. **OPEN CHANNELS** include, but shall not be limited to, natural and man-made drainage ways, **SWALES**, streams, ditches, canals, and **PIPES** flowing partly full.

**OPEN SPACE** - Any parcel or **AREA** of land or water essentially unimproved and set aside, dedicated, designated, or reserved for public or private use or enjoyment or for the use and

enjoyment of owners and occupants of land adjoining or neighboring such OPEN SPACE.

ORDINANCE – The Stormwater Management Ordinance of Manheim Township.

OUTLET - Points of water disposal from a stream, river, lake, tidewater or artificial drain.

PARKING LOT - An accessory use provided on a LOT for the use of the general public designated for short-term parking of vehicles. Vehicles shall be limited to currently registered and inspected vehicles

PEAK DISCHARGE - The maximum rate of STORMWATER RUNOFF from a specific STORM EVENT.

PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION (PADEP) - The Pennsylvania Department of Environmental Protection or any agency successor to the Pennsylvania Department of Environmental Protection.

PENNSYLVANIA DEPARTMENT OF TRANSPORTATION (PennDOT) - The Pennsylvania Department of Transportation or any agency successor to the Pennsylvania Department of Transportation.

PERMEABLE PAVEMENT - A man-made surface that allows water to penetrate through and percolate into soil. Water is able to seep through into lower layers of gravel, then to the soil. Permeable paving materials include porous asphalt, pervious concrete, permeable interlocking concrete paving blocks, concrete grid pavers, and perforated brick pavers.

PIPE - A CULVERT, closed conduit, or similar structure (including appurtenances) that conveys STORMWATER.

PLANNING COMMISSION - The Manheim Township Planning Commission, Lancaster, Pennsylvania.

POINT SOURCE - Any discernible, confined and discrete CONVEYANCE, including, but not limited to, any PIPE, ditch, CHANNEL, tunnel or conduit from which STORMWATER is or may be discharged, as defined in State regulations at 25 Pa. Code Chapter 92.1.

PROJECT SITE - An AREA of land under DEVELOPMENT and within the jurisdiction of this ORDINANCE.

RATIONAL FORMULA (RATIONAL METHOD) - A rainfall-RUNOFF relation used to estimate peak STORMWATER flow.

REDEVELOPMENT - Any physical improvement to a previously developed LOT that involves earthmoving, removal, or addition of IMPERVIOUS SURFACES. See also DEVELOPMENT.

REGIONAL STORMWATER MANAGEMENT PLAN - A plan to manage STORMWATER RUNOFF from an AREA larger than a single PROJECT SITE. A Regional STORMWATER MANAGEMENT PLAN could include two adjacent parcels, an entire WATERSHED, or some defined AREA in between. Regional STORMWATER MANAGEMENT PLANs can be prepared for new DEVELOPMENT, or as a retrofit to manage RUNOFF from already developed AREAs.

**REGULATED ACTIVITY** - An action or proposed action that has an impact upon **STORMWATER RUNOFF** and which is specified in Section 105 of this **ORDINANCE**.

**REGULATED EARTH DISTURBANCE ACTIVITY** - **RUNOFF** Activity involving Earth Disturbance subject to regulation under 25 Pa. Code Chapter 92, 25 Pa. Code **CHAPTER 102**, or the Clean Streams Law.

**RETURN PERIOD** - The average interval, in years, within which a **STORM EVENT** of a given magnitude can be expected to occur one time. For example, the twenty-five (25) year **RETURN PERIOD** rainfall would be expected to occur on average once every twenty-five (25) years; or stated in another way, the probability of a twenty-five (25) year **STORM EVENT** occurring in any one year is a four (4) percent chance.

**RIPARIAN BUFFER** - Undisturbed riparian land adjacent to a natural **WATERCOURSE** and other bodies of water for the purpose of stabilizing banks, filtering pollutants from **RUNOFF** and for providing habitat for a variety of wildlife. This is not intended to include man-made **SWALES** or detention facilities utilized solely for **STORMWATER MANAGEMENT** from the **PROJECT SITE**.

**RIPARIAN BUFFER/RIPARIAN FOREST BUFFER EASEMENT** - An easement created for the purpose of protecting and preserving a **RIPARIAN BUFFER** or **RIPARIAN FOREST BUFFER**.

**RIPARIAN FOREST BUFFER** - A type of **RIPARIAN BUFFER** that consists of permanent vegetation that is predominantly native trees, shrubs and forbs along a **WATERCOURSE** that is maintained in a natural state or sustainably managed to protect and enhance water quality, stabilize stream **CHANNELS** and banks, and separate land use activities from surface waters.

**RUNOFF** - Any part of precipitation that flows over the land surface.

**SEDIMENT** - Solid material, both mineral and organic, that is in suspension, is being transported, or has been moved from its site of origin by water, wind or chemical action.

**SEDIMENT BASIN** - A barrier, dam, retention or **DETENTION BASIN** located and designed to retain **SEDIMENT** material including rock, sand, gravel, silt or other material transported by water.

**SEDIMENT POLLUTION** - The placement, discharge or any other introduction of **SEDIMENT** into the **WATERS OF THE COMMONWEALTH** occurring from the failure to design, construct, implement or maintain control measures and control facilities in accordance with the requirements of this **ORDINANCE**.

**SEDIMENTATION** - The action or process by which mineral or organic matter is accumulated or deposited by the movement of water, wind or chemical action.

**SHEET FLOW** - **RUNOFF** which flows over the ground surface as a thin, even layer, not concentrated in a **CHANNEL**.

**SMALL STORM EVENT** - A storm having a **FREQUENCY** of recurrence of once every two (2) years or smaller. See 402.2. **VOLUME CONTROL**.

**SOIL-COVER COMPLEX METHOD** - A method of RUNOFF computation developed by the SCS (now NRCS) that is based on relating soil type and land use/cover to a RUNOFF parameter called Curve Number (CN). For more information, see “Urban Hydrology for Small WATERSHEDs”, Second edition, Technical Release No. 55, SCS, June 1986 or most current edition.

**STATE WATER QUALITY REQUIREMENTS** - The regulatory requirements to protect, maintain, reclaim, and restore water quality under Title 25 of the Pennsylvania Code, the Clean Streams Law and the CLEAN WATER ACT.

**STORM EVENT** - A storm of a specific duration, intensity, and FREQUENCY.

**STORM FREQUENCY** - The number of times that a given STORM EVENT occurs or is exceeded on the average in a stated period of years. See RETURN PERIOD.

**STORM SEWER** - A system of PIPES, conduits, SWALEs or other similar structures including appurtenant works which carries intercepted RUNOFF, and other drainage, but excludes domestic sewage and industrial waste.

**STORMWATER** - Drainage RUNOFF from the surface of the land resulting from precipitation, snow or ice melt.

**STORMWATER MANAGEMENT** - A program of controls and measures designed to regulate the quantity and quality of STORMWATER RUNOFF from a DEVELOPMENT while promoting the protection and conservation of groundwater and GROUNDWATER RECHARGE.

**STORMWATER MANAGEMENT ACT** - Act of October 4, 1978, P.L. 864, No. 167, as amended 32 P.S. § 680.1 et seq., and as may be amended in the future.

**STORMWATER MANAGEMENT FACILITY** - Any structure, natural or man-made, that, due to its condition, design, or CONSTRUCTION, conveys, stores, infiltrates, evaporates, transpires, cleans or otherwise affects STORMWATER RUNOFF. Typical STORMWATER MANAGEMENT FACILITIES include, but are not limited to, detention and retention basins, OPEN CHANNELs, WATERCOURSEs, road gutters, SWALEs, STORM SEWER(s), PIPE(s), BMPs and infiltration structures. Those controls and measures used to effect a STORMWATER MANAGEMENT program.

**STORMWATER MANAGEMENT OPERATION AND MAINTENANCE PLAN (O&M PLAN)** - A plan, including a narrative, to ensure proper functioning of the STORMWATER MANAGEMENT FACILITIES in accordance with Article VI of this ORDINANCE.

**STORMWATER MANAGEMENT PLAN** - The Plan prepared by the APPLICANT or his representative indicating how STORMWATER RUNOFF will be managed at a particular PROJECT SITE according to this ORDINANCE. The STORMWATER MANAGEMENT PLAN shall consist of site plans, calculations, narrative and supplemental information described in Article IV.

**STRUCTURAL BMPS** - Physical devices and practices that capture and treat STORMWATER RUNOFF. STRUCTURAL BMPS include but are not limited to, wet ponds, constructed

wetlands, small scale underground treatment systems, infiltration facilities, filter strips, low impact design, bioretention, permeable paving, vegetated swales, riparian or forested riparian buffers, sand filters, detention basins, manufactured devices, and other BMPs as referenced in Chapter 6 of the Pennsylvania Stormwater BMP Manual (363-300-002). Structural STORMWATER BMPs are permanent appurtenances to the PROJECT SITE

SWALE - A wide shallow ditch which carries surface water RUNOFF.

TIMBER OPERATIONS - See FOREST MANAGEMENT.

TIME OF CONCENTRATION ( $T_c$ ) - The time for surface RUNOFF to travel from the hydraulically most distant point of the WATERSHED to a point of interest within the WATERSHED. This time is the combined total of overland flow time and flow time in PIPEs or CHANNELs, if any.

TOP OF STREAMBANK - First substantial break in slope between the edge of the bed of the stream and the surrounding terrain. The TOP OF STREAMBANK can either be a natural or constructed (that is, road or railroad GRADE) feature, lying generally parallel to the WATERCOURSE.

TOTAL RESIDUAL CHLORINE (TRC) – The total amount of chlorine residual present in a water sample after a given contact time.

TOWNSHIP - The Township of Manheim, Lancaster County, Pennsylvania.

TOWNSHIP ENGINEER - A duly registered professional ENGINEER, licensed as such in the Commonwealth of Pennsylvania, employed by the TOWNSHIP or engaged as a consultant thereto and appointed as the ENGINEER for the TOWNSHIP.

TR-20 (CALIBRATED) - The computer-based hydrologic modeling technique adapted to the Cocalico Creek, Conestoga River, and Little Conestoga Creek WATERSHEDs for the ACT 167 PLAN. The models have been calibrated to reflect published and observed flow values by adjusting key model input parameters.

UNITED STATES DEPARTMENT OF AGRICULTURE (USDA) - The United States Department of Agriculture or any agency successor to the United States Department of Agriculture.

VOLUME CONTROL - STORMWATER MANAGEMENT controls, or BMPs, used to remove a predetermined amount of RUNOFF or the increase in volume between the pre- and post-DEVELOPMENT DESIGN STORM.

WATERCOURSE - A permanent or intermittent stream, river, brook, run, creek, CHANNEL, SWALE, pond, lake or other body of surface water, carrying or holding surface water, whether natural or artificial, having defined bed and banks.

WATERS OF THE COMMONWEALTH - Any and all rivers, streams, creeks, rivulets, ditches, WATERCOURSEs, STORM SEWERs, lakes, dammed water, WETLANDs, ponds, springs, and all other bodies or CHANNELs of CONVEYANCE of surface and underground water, or parts

thereof, whether natural or artificial, within or on the boundaries of Pennsylvania.

**WATERSHED** - All the land from which water drains into a particular **WATERCOURSE**.

**WETLAND** - Those **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 soil conditions, including swamps, marshes, bogs, ferns, constructed **WETLANDs** and similar **AREAs**.

**WETLAND BUFFER** - An **AREA** of land immediately adjacent to a **WETLAND** that is set aside for naturally occurring vegetation or the reestablishment of native plant species and as a transition zone to protect the **WETLAND** from impact caused by **DEVELOPMENT** of adjacent upland **AREAs**.

**WOODLAND** - Land predominantly covered with trees and shrubs. Without limiting the foregoing, **WOODLANDs** include all land **AREAs** of 10,000 square feet or greater, supporting at least one-hundred (100) trees per acre, so that either (i) at least fifty (50) trees are two (2) inches or greater in diameter at breast height, or (ii) fifty (50) trees are at least twelve (12) feet in height.

**ARTICLE III. PLAN REQUIREMENTS**

**SECTION 301. GENERAL REQUIREMENTS**

1. Prior to preliminary or final plan approval of any subdivision plan, land DEVELOPMENT PLAN, the issuance of any permit, or the commencement of any DEVELOPMENT within the jurisdiction of this ORDINANCE, the APPLICANT shall submit a STORMWATER MANAGEMENT PLAN application to the TOWNSHIP for approval. No approval of any subdivision plan, land DEVELOPMENT PLAN, issuance of any permit, or commencement of any DEVELOPMENT within the jurisdiction of this ORDINANCE shall be granted prior to approval of a STORMWATER MANAGEMENT PLAN application.
2. APPLICANTs are encouraged to schedule a pre-application meeting to review the APPLICANT's overall STORMWATER MANAGEMENT concept with the TOWNSHIP. The pre-application meeting is not mandatory, shall not constitute formal filing of a plan with the TOWNSHIP or imply any approvals by the TOWNSHIP. Topics discussed may include the following:
  - A. Geological information, plans and other available data obtained by the APPLICANT.
  - B. Findings of the site analysis including identification of any environmentally sensitive AREAs, wellhead protection AREAs, RIPARIAN BUFFERS, HYDROLOGIC SOIL GROUPs (HSG), existing NATURAL DRAINAGEWAYs, KARST features, AREAs conducive to infiltration to be utilized for VOLUME CONTROL, etc.
  - C. Results of infiltration testing performed.
  - D. Applicable TOWNSHIP Subdivision and Land Development Ordinance, Floodplain Ordinance and Zoning Ordinance provisions.
  - E. The APPLICANT's conceptual project layout, including proposed STRUCTURAL and NON-STRUCTURAL BMPS with consideration given to maximizing the use of both STRUCTURAL and NON-STRUCTURAL BMPS designed to accomplish the following:
    - (1) Minimize impact by identifying environmentally sensitive AREAs early on in the process and protecting them.
    - (2) Minimize impervious cover.
    - (3) Prevent STORMWATER generation.
    - (4) Prevent pollutant loads.
    - (5) Maximize the use of low impact and green infrastructure measures.
3. Preparation of a STORMWATER MANAGEMENT PLAN is required for all REGULATED ACTIVITIES, unless preparation and submission of the STORMWATER MANAGEMENT PLAN is specifically exempted or granted impervious credit according to Section 109.



## **SECTION 302. PLAN CONTENTS**

The following items shall be included as part of the STORMWATER MANAGEMENT PLAN:

1. Plans, showing the following information:
  - A. The copies of all plans submitted with the application for STORMWATER MANAGEMENT approval can be either black and white or blue and white prints.
    - (1) The sheet sizes shall be either 18 inches by 24 inches or 24 inches by 36 inches.
    - (2) Proposed name or identifying title of project.
    - (3) Name and address of the landowner and APPLICANT of the PROJECT SITE.
    - (4) Name and address of the individual or firm preparing the plan.
    - (5) Plan date and date of the latest revision to the plan, north point, graphic scale and written scale. All plans shall be at a scale of 20, 30, 40 or 50 feet to the inch.
    - (6) If the plan is prepared in two (2) or more drawing sheets, a full size drawing and key map showing the location of the sheets and a match line shall be placed on each sheet.
    - (7) Each sheet shall be numbered to show the relationship to the total number of sheets in the plan set.
    - (8) Plans shall be prepared in a form that meets the requirements for recording for the Office of the Recorder of Deeds of Lancaster County.
    - (9) Total acreage of the PROJECT SITE and the tract of land on which the PROJECT SITE is located.
    - (10) A location map, for the purpose of locating the PROJECT SITE to be developed, at a minimum scale of 2,000 feet to the inch, showing the relation of the tract to adjoining property and to all streets and TOWNSHIP boundaries existing within 1,000 feet of any part of the tract of land on which the PROJECT SITE is proposed to be developed.
2. Existing features.
  - A. Tract boundaries showing distances, bearings and curve data, as located by field survey or by deed plotting.
  - B. Existing contours at vertical intervals of one (1) or two (2) feet for land with an average natural slope of twenty (20) percent or less and at vertical intervals of five (5) feet for more steeply sloping land. The location of the benchmark and the datum used shall also be indicated.
  - C. The names of all owners of all immediately adjacent unplatted land, the names of all

proposed or existing DEVELOPMENTS immediately adjacent, and the locations and dimensions of any streets or easements shown thereon.

- D. The names, locations and dimensions of all existing streets, railroads, WATERCOURSES, drainage facilities, FLOODPLAINS, streams, lakes, ponds, and other waterbodies, existing drainage courses, KARST features and other significant features within 200 feet of any part of the tract proposed to be developed and the location of all buildings and structures.
  - E. Other physical features including WETLANDS, sinkholes, AREAS of NATIVE VEGETATION to be preserved including trees greater than two (2) inches in diameter at breast height, WOODLANDS, other environmentally sensitive AREAS and the total extent of the upstream AREA draining through the PROJECT SITE.
  - F. The locations of all existing utilities, including on-lot disposal systems and wells, sanitary sewers, and water lines within 200 feet of property lines.
  - G. Soil boundaries and soil types as designated by the NRCS.
3. Proposed features.
- A. The proposed land use, the number of LOTS and dwelling units and the extent of commercial, industrial or other nonresidential uses.
  - B. The locations and dimensions of all proposed streets, parks, playgrounds, and other public AREAS, sewer and water facilities; LOT lines and building locations, and parking compounds, driveways, paved AREAS and other IMPERVIOUS SURFACES.
  - C. The proposed changes to land surface and vegetative cover including AREAS to be cut or FILLED.
  - D. Proposed contours at vertical intervals of one (1) or two (2) feet for land with an average natural slope of twenty (20) percent or less and at vertical intervals of five (5) feet for more steeply sloping land.
  - E. Finished elevations on tops of curbs at LOT lines projected and LOT corners. Elevations shall be shown to the nearest tenth of a foot.
  - F. A summary table depicting the minimum lowest floor elevation, which includes the basement for all LOTS located immediately adjacent to the FLOODPLAIN AREA.
  - G. The location of any proposed on-LOT disposal system, replacement drainfield easements, and water supply wells.
  - H. The location of any proposed signage identifying the constructed BMP. Proposed signage shall be installed on any nonresidential property or property under the control of a homeowners association or community association.
4. STORMWATER MANAGEMENT FACILITIES.

- A. All calculations, assumptions, and criteria used in the design of the STORMWATER MANAGEMENT FACILITIES must be shown. If multiple facilities are used in conjunction with each other, such as infiltration BMPs with vegetation based management practices, a summary narrative shall be included describing any sequencing and how the facilities are meant to function with each other to manage STORMWATER RUNOFF in accordance with this ORDINANCE.
- B. All STORM SEWERS along with any proposed connections to existing facilities.
- C. Plans and profiles, drawn to scale, of all proposed STORMWATER MANAGEMENT FACILITIES including BMPs, drainage structures, PIPES, OPEN CHANNELS, and SWALEs and including vertical and horizontal alignment, size and type of material. This information shall be of the quality required for the CONSTRUCTION of all facilities. All SWALEs and OPEN CHANNELS shall have centerline invert elevations shown every one-hundred (100) feet and at changes in GRADE. Prior to final plan recording, such plans and profiles of all proposed STORMWATER MANAGEMENT FACILITIES shall exclude any other utility information and shall be limited to the STORMWATER MANAGEMENT FACILITIES.
- D. When subdivision or land DEVELOPMENT PLAN applications, whether preliminary or final, are submitted in sections, a generalized STORMWATER MANAGEMENT PLAN for the entire PROJECT SITE shall be submitted in addition to the detailed STORMWATER MANAGEMENT PLAN for the proposed section. This generalized plan shall demonstrate how the STORMWATER of the proposed section will relate to the entire DEVELOPMENT. The amount and velocity at the discharge point of the section shall be included in the data submitted. If temporary facilities are required for CONSTRUCTION of a section, such facilities shall be included in the submitted plans.
- E. A minimum twenty (20) foot wide ACCESS EASEMENT shall be provided for all STORMWATER MANAGEMENT FACILITIES. ACCESS EASEMENTs shall provide for ingress and egress to a public right-of-way.
- F. A minimum twenty (20) foot wide DRAINAGE EASEMENT shall be provided where the CONVEYANCE, treatment, or storage of STORMWATER, either existing or proposed, is identified on the STORMWATER MANAGEMENT PLAN. DRAINAGE EASEMENTs shall be provided to contain and convey the One-Hundred (100) Year STORM EVENT.
- G. Where PERMEABLE PAVEMENT is to be installed, pavement material and CONSTRUCTION specifications shall be included.
- H. A planting plan for all vegetated BMPs in accordance with Section 401.4 and Section 403.7 shall be provided.
- I. A note on the plan indicating any AREA that is not to be offered for dedication along with a statement that the TOWNSHIP is not responsible for maintenance of any AREA not dedicated for public use. The only AREAs that shall be offered for

dedication are those STORMWATER MANAGEMENT FACILITIES situated within a dedicated TOWNSHIP right-of-way.

- J. A table on the plan indicating the assumed square footage of IMPERVIOUS SURFACE for each LOT.
  - K. A table on the plan indicating the assumed square footage of IMPERVIOUS SURFACE permitted for each STORMWATER MANAGEMENT FACILITY.
  - L. A summary table on the plan identifying all BMPs including BMP ID, drainage AREA to the BMP, name of receiving waterbody, the BMP's inspection and maintenance FREQUENCY, name of responsible person or organization at the time of STORMWATER MANAGEMENT PLAN approval, and the LOT numbers where the BMP is located. Refer to Figure 8, Attachment 1 of the MTSMRM.
  - M. A note on the STORMWATER MANAGEMENT PLAN referencing the STORMWATER MANAGEMENT Agreement and Declaration of Easement and the requirement to implement BMPs in accordance with the minimum design standards and requirements for BMPs set forth in this ORDINANCE, in any deed of CONVEYANCE for the PROJECT SITE or any part thereof.
  - N. A note on the STORMWATER MANAGEMENT PLAN indicating that nothing shall be placed, planted, set or put within the AREA of an easement. No ALTERATIONS to SWALEs, basins, BMPs or other STORMWATER MANAGEMENT FACILITIES shall be permitted.
5. EROSION and SEDIMENTATION Controls.
- A. The type, location and extent of all EROSION and SEDIMENTATION Control measures shall be shown on an EROSION AND SEDIMENT POLLUTION CONTROL PLAN including a narrative that conforms to the requirements of 25 Pa. Code CHAPTER 102.
  - B. Evidence of approval of the EROSION AND SEDIMENT POLLUTION CONTROL PLAN from the CONSERVATION DISTRICT as required by 25 Pa. Code CHAPTER 102 prior to final plan approval.
  - C. EROSION and SEDIMENTATION Controls are to be designed and maintained throughout the construction phase of the PROJECT SITE, beginning with initial topsoil removal and through the conversion and operation of all Post Construction STORMWATER MANAGEMENT IMPROVEMENTS. Specifically, the runoff conditions immediately downstream from the PROJECT SITE must be maintained or be less than the pre-developed rates during construction. Calculations at significant milestone dates within the construction phasing shall determine if the requirement is met. This will require attention to sequencing of land cover and controls on the PROJECT SITE. The designer shall provide information to define how such protection is incorporated into all phases of the CONSTRUCTION activity.

6. Supplemental information.
  - A. A written description of the PROJECT SITE including a description of existing natural and hydrologic features and any environmentally sensitive AREAs.
  - B. A written report, including STORMWATER RUNOFF calculations for both pre-DEVELOPMENT and post-DEVELOPMENT conditions including complete hydrologic, hydraulic and structural computations for all STORMWATER MANAGEMENT FACILITIES.
  - C. A written description of the overall STORMWATER MANAGEMENT concept for the project, including a description of permanent STORMWATER MANAGEMENT techniques, STRUCTURAL and NON-STRUCTURAL BMPS to be employed and CONSTRUCTION specifications of the materials to be used for Structural STORMWATER MANAGEMENT FACILITIES to be applied both during and after DEVELOPMENT, and expected project time schedule. The narrative shall include a description of any treatment train and how the facilities are meant to function with each other to manage STORMWATER RUNOFF.
  - D. A copy of the NPDES application.
  - E. A copy of the NPDES CONSTRUCTION Permit for REGULATED EARTH DISTURBANCE ACTIVITIES prior to final plan approval. Information supporting any deviation, modification or renewal on an approved NPDES permit shall be immediately submitted to the Township for review and approval.
  - F. Evidence of approval for any activities that require a PADEP Joint Permit and are regulated under 25 Pa. Code CHAPTER 105 or CHAPTER 106, require a PennDOT Highway Occupancy Permit, or require any other permit under applicable state or federal regulations, the permit(s) shall be part of the STORMWATER MANAGEMENT PLAN and must be obtained prior to final plan approval.
  - G. In AREAs of CARBONATE GEOLOGY, a geologic assessment of the effects of STORMWATER RUNOFF and infiltration on sinkholes as specified in this ORDINANCE.
  - H. The effect of the project (in terms of RUNOFF volumes, water quality and peak flows) on adjacent properties and on any existing TOWNSHIP STORMWATER MANAGEMENT FACILITIES that may receive RUNOFF from the PROJECT SITE.
  - I. When utilization of a PennDOT STORMWATER MANAGEMENT FACILITY is proposed, a Declaration of Adequacy/Highway Occupancy Permit from the PennDOT District Office as well as an executed and recorded Drainage Indemnification Agreement with the TOWNSHIP is required. See informational sheet in the MTSMRM.
  - J. An O&M PLAN that clearly sets forth the operation and maintenance responsibility that address the requirements of Article VI for all temporary and permanent STORMWATER MANAGEMENT FACILITIES and EROSION and SEDIMENTATION Control Facilities, including:

- (1) Description of temporary and permanent maintenance requirements.
  - (2) Identification of a responsible individual, corporation, association or other entity for ownership and maintenance of both temporary and permanent STORMWATER MANAGEMENT and EROSION and SEDIMENTATION Control Facilities.
  - (3) Establishment of suitable easements for access to and protection of all facilities.
  - (4) The intent of these regulations is to provide private ownership, operation and maintenance of STORMWATER MANAGEMENT and EROSION and SEDIMENTATION Control Facilities. Where the STORMWATER MANAGEMENT PLAN proposes that the TOWNSHIP own or maintain the facilities, a description of the methods, procedures, and the extent to which any facilities shall be turned over to the TOWNSHIP shall be incorporated as an integral part of the plan.
7. All landowners of land included in the STORMWATER MANAGEMENT PLAN shall be required to execute all applications and final documents.
  8. The following certificates shall be shown on the plan:
    - A. A certificate signed and sealed by an individual registered in the Commonwealth of Pennsylvania and qualified under all applicable local and State laws to perform such duties, indicating the compliance of the design of the STORMWATER MANAGEMENT FACILITIES with the provisions of this ORDINANCE. See form of certificate in the MTSMRM.
    - B. A statement, duly acknowledged before an officer authorized to take acknowledgement of deeds and signed by the landowner of the property, to the effect that the STORMWATER MANAGEMENT PLAN is the act and deed of the landowner, that he/she is the owner of the property shown on the survey and plan, and that he/she desires the same to be recorded as such. Said statement shall be dated following the last change or revision to the STORMWATER MANAGEMENT PLAN. See form of certificate in the MTSMRM.
    - C. Certificate of dedication of IMPROVEMENTS and other public property to the TOWNSHIP or other appropriate municipal or governmental authority. See form of certificate in the MTSMRM.
    - D. Certificate for review by the TOWNSHIP ENGINEER. See form of certificate in the MTSMRM.
    - E. A certification signed by the registered professional GEOLOGIST or professional ENGINEER. See form of certificate in the MTSMRM.
  9. FINANCIAL SECURITY for the completion of STORMWATER MANAGEMENT FACILITIES is set forth in Article V of this ORDINANCE.
  10. Letters of approval from all utilities when CONSTRUCTION occurs within an existing utility easement or existing utility right-of-way.

11. Prior to the full release of FINANCIAL SECURITY, the APPLICANT shall be responsible for providing a Record Plan of all STORMWATER MANAGEMENT FACILITIES included in the approved STORMWATER MANAGEMENT PLAN. The Record Plan and an explanation of any discrepancies with the design plans shall be submitted to the TOWNSHIP or its DESIGNEE for final approval. The Record Plan shall include a final certification as required by CHAPTER 102, from an ENGINEER, Landscape Architect, Surveyor or other qualified person registered in the Commonwealth of Pennsylvania.
12. The APPLICANT shall submit both an approved and record plan on CD in AutoCAD data file format. This data file, when opened in AutoCAD, shall provide a complete display of the entire STORMWATER MANAGEMENT PLAN including all information contained on the approved final plan. The file shall be in AutoCAD 2000 or later format. All coordinates as depicted on the plan shall be based on the PA South Zone State Plane Coordinate System (NAD83 for horizontal and NAVD88 for vertical).

### **SECTION 303. PLAN PROCEDURES FOR SUBDIVISION AND LAND DEVELOPMENTS**

1. All STORMWATER MANAGEMENT PLANs for subdivision and land DEVELOPMENT shall adhere to the procedures required by The Manheim Township Subdivision and Land DEVELOPMENT, including the number of copies of material to be submitted, STORMWATER MANAGEMENT PLANs for all other DEVELOPMENT shall adhere to the plan procedure delineated in Section 304 of this ORDINANCE.
2. For any activities that require a PADEP Joint Permit Application and regulated under 25 Pa. Code CHAPTER 105 or CHAPTER 106, require a PennDOT Highway Occupancy Permit, or require any other permit under applicable state or federal regulations, the permit(s) shall be part of the STORMWATER MANAGEMENT PLAN.

### **SECTION 304. PLAN PROCEDURE FOR OTHER DEVELOPMENT ACTIVITIES**

1. Two (2) copies of the STORMWATER MANAGEMENT PLAN, two (2) copies of, all supporting information required in Section 301, an application, a STORMWATER MANAGEMENT PLAN checklist, and a filing fee pursuant to the adopted TOWNSHIP fee schedule shall be submitted to the TOWNSHIP Manager or DESIGNEE. The TOWNSHIP Manager or DESIGNEE shall submit all applications to the TOWNSHIP ENGINEER for review and recommendations.
  - A. In the event that APPLICANT disputes the amount of such review fees, the APPLICANT shall, within ten (10) days of the filing date, notify TOWNSHIP that such fees are disputed, in which case the TOWNSHIP shall not delay or disapprove a STORMWATER MANAGEMENT application due to the APPLICANT's request over disputed fees.
  - B. In the event TOWNSHIP and the APPLICANT cannot agree on the amount of review fees which are reasonable and necessary, then the APPLICANT and TOWNSHIP shall follow the procedure for dispute resolution set forth in § 503 of the MPC.
2. The APPLICANT is responsible for submitting plans to any other agencies including but not limited to the CONSERVATION DISTRICT, PennDOT, and PADEP when approvals from these agencies are required. Final approval shall be conditioned upon the

APPLICANT obtaining all necessary permits.

3. If a plan submission is determined by the TOWNSHIP or its DESIGNEE to be incomplete, the APPLICANT shall be notified of the deficiencies. The STORMWATER MANAGEMENT PLAN Checklist will be used as the basis for determining whether a submission is complete or incomplete. See STORMWATER MANAGEMENT PLAN checklist in the MTSMRM. The TOWNSHIP is not responsible for returning an incomplete submission to the APPLICANT. If the application is deemed complete, it shall be accepted for filing as of the date of submission. Acceptance of the application shall not, however, constitute an approval of the plan or a MODIFICATION of any deficiencies or irregularities. The APPLICANT may appeal the TOWNSHIP's decision not to accept a particular application in accordance with Section 809 of this ORDINANCE.
4. Approval of the STORMWATER MANAGEMENT PLAN application shall be communicated to the APPLICANT by mail at the APPLICANT's last known address.
5. No grading permits, building permits or certificates of occupancy shall be issued unless the TOWNSHIP ENGINEER verifies that the STORMWATER MANAGEMENT standards and requirements herein are satisfied and the STORMWATER MANAGEMENT PLAN has been recorded.
6. Approval of a STORMWATER MANAGEMENT PLAN by the TOWNSHIP shall not be construed as an indication that the plan complies with the standards of any other agency of the Commonwealth.

#### **SECTION 305. STORMWATER MANAGEMENT PLAN REVIEW**

1. The TOWNSHIP or its DESIGNEE shall review the STORMWATER MANAGEMENT PLAN for consistency with this ORDINANCE.
2. In the case of a subdivision or land development, the TOWNSHIP ENGINEER shall review the STORMWATER MANAGEMENT PLAN for conformance with The Manheim Township Subdivision and Land Development Ordinance, for all provisions not superseded by this ORDINANCE.
3. The TOWNSHIP or its DESIGNEE's approval of a STORMWATER MANAGEMENT PLAN shall be valid for a period not to exceed five (5) years unless a schedule is submitted and approved for a longer period of time as part of the approval process. This five (5) year time period shall commence on the date that the TOWNSHIP or its DESIGNEE approves the STORMWATER MANAGEMENT PLAN. If STORMWATER MANAGEMENT FACILITIES included in this approved STORMWATER MANAGEMENT PLAN have not been completed and inspected within this five (5) year time period, then the TOWNSHIP or its DESIGNEE may consider the STORMWATER MANAGEMENT PLAN disapproved and may recommend that the TOWNSHIP revoke any and all permits. STORMWATER MANAGEMENT PLANs that are considered disapproved by the TOWNSHIP or its DESIGNEE shall be resubmitted in accordance with this ORDINANCE.

#### **SECTION 306. STORMWATER MANAGEMENT PLAN REVISION**



1. Revisions to a STORMWATER MANAGEMENT PLAN after submission but before TOWNSHIP approval shall require a resubmission of the modified STORMWATER MANAGEMENT PLAN consistent with Section 304 of this ORDINANCE and be subject to review as specified in Section 305 of this ORDINANCE.
2. Any substantial revisions to a STORMWATER MANAGEMENT PLAN after approval shall be submitted as a new plan to the TOWNSHIP, accompanied by the applicable application, supplemental information and filing fee pursuant to the adopted TOWNSHIP fee schedule.

**ARTICLE IV. STORMWATER MANAGEMENT**

**SECTION 401. GENERAL REQUIREMENTS**

1. All REGULATED ACTIVITIES shall include such measures as necessary to:
  - A. Protect health, safety, and property;
  - B. Meet the water quality goals of this ORDINANCE by implementing measures to:
    - (1) Protect and/or improve the function of FLOODPLAINS, WETLANDS, and WOODLAND AREAS.
    - (2) Protect and/or improve native plant communities including those within the RIPARIAN BUFFER or RIPARIAN FOREST BUFFER.
    - (3) Protect and/or improve NATURAL DRAINAGEWAYS from EROSION.
    - (4) Minimize thermal impacts to WATERS OF THE COMMONWEALTH.
2. For all REGULATED ACTIVITIES, EROSION and SEDIMENT Control BMPs shall be designed, implemented, operated, and maintained to meet the purposes and requirements of this ORDINANCE and to meet all requirements under Title 25 of the Pennsylvania Code and the Clean Streams Law. Various BMPs and their design standards are listed in the *Pennsylvania Department of Protection, Erosion and Sediment Pollution Control Program Manual* (E&S Manual), No. 363-2134-008 (March 2012), as amended and updated.
3. A variety of STRUCTURAL and NON-STRUCTURAL BMPS should be employed and tailored to suit the PROJECT SITE. Refer to the MTSMRM.
4. A planting plan is required for all vegetated STORMWATER BMPs. (See Section 403.7.)
  - A. Native or naturalized/non-INVASIVE VEGETATION suitable to the soil and hydrologic conditions of the site shall be used unless otherwise specified in the BMP MANUAL.
  - B. INVASIVE VEGETATION may not be included in any planting schedule. (See Invasive Plants in Pennsylvania as published by the Department of Conservation and Natural Resources.)
  - C. The limit of existing, NATIVE VEGETATION to remain shall be delineated on the plan along with proposed CONSTRUCTION protection measures.
  - D. Prior to CONSTRUCTION, a tree protection zone shall be delineated at the dripline of the tree canopy. The tree protection zone of trees scheduled to remain shall be marked. Groups of trees may be marked by a protection zone along the outer most dripline boundary. A forty-eight (48) inch high snow fence or forty-eight (48) inch high CONSTRUCTION fence mounted on steel posts located eight (8) feet on center shall be placed along the tree protection boundary. No CONSTRUCTION, storage of

material, temporary parking, pollution of soil, or regrading shall occur within the tree protection zone.

- E. All planting shall be performed in conformance with good nursery and landscape practice. Plant materials shall conform to the standards recommended by the American Association of Nurseryman, Inc. in the American Standard of Nursery Stock.
  - (1) Planting designs are encouraged to share planting space for optimal root growth whenever possible.
  - (2) No staking or wiring of trees shall be allowed without a maintenance note requiring the stake and/or wire to be removed within one (1) year of planting.
- 5. All STORMWATER MANAGEMENT PLANS shall be designed and certified by individuals registered in the Commonwealth of Pennsylvania and qualified to perform such duties.
- 6. STORMWATER MANAGEMENT FACILITIES which involve a State Highway shall be subject to the approval of PennDOT.
- 7. STORMWATER MANAGEMENT FACILITIES located within or affecting the FLOODPLAIN of any WATERCOURSE shall also be subject to the requirements of The Floodplain Ordinance of Manheim Township which regulates CONSTRUCTION and DEVELOPMENT within AREAS of the TOWNSHIP subject to FLOODING. STORMWATER RUNOFF from a PROJECT SITE shall flow directly into a WATERCOURSE or into an existing STORM SEWER, or onto adjacent properties in an approved manner similar to the RUNOFF characteristics of the pre-DEVELOPMENT flow. Maximum use shall be made of the existing on-site natural and man-made STORMWATER MANAGEMENT FACILITIES.
- 8. STORMWATER RUNOFF shall not be transferred from one WATERSHED to another unless the WATERSHEDs are sub-WATERSHEDs of a common WATERSHED which join together within the perimeter of the property, and the effect of the transfer does not alter the PEAK DISCHARGE onto downstream lands, or DRAINAGE EASEMENTs from the affected landowners are provided.
- 9. All STORMWATER RUNOFF flowing over or through the PROJECT SITE shall be considered in the design of the STORMWATER MANAGEMENT FACILITIES.
- 10. CARBONATE GEOLOGY Report. A detailed geologic report prepared by a GEOLOGIST or ENGINEER must be submitted as part of the STORMWATER MANAGEMENT PLAN and shall include the following:
  - A. The location of the following KARST features:
    - (1) Sinkholes.
    - (2) Closed depressions.
    - (3) LINEAMENTs in carbonate AREAS.

- (4) Fracture traces.
  - (5) Caverns.
  - (6) Intermittent lakes.
  - (7) EPHEMERAL and DISAPPEARING STREAMs.
  - (8) Bedrock pinnacles (surface or subsurface).
- B. The design of all STORMWATER MANAGEMENT FACILITIES over KARST features shall include an evaluation of measures to minimize adverse effects and to prevent groundwater contamination, and where necessary, sinkhole formation.
  - C. A plan for remediation of any identified KARST features shall be provided.
  - D. Impacts of STORMWATER MANAGEMENT FACILITIES on adjacent KARST features and impacts of KARST features on adjacent STORMWATER MANAGEMENT FACILITIES shall be identified.
  - E. STORMWATER shall not be discharged into sinkholes.
  - F. It shall be the APPLICANT's responsibility to verify if the PROJECT SITE is underlain by CARBONATE GEOLOGY.
  - G. Whenever a STORMWATER MANAGEMENT FACILITY will be located in an AREA underlain by CARBONATE GEOLOGY, a geological evaluation of the proposed location by a GEOLOGIST or ENGINEER shall be conducted to determine the design parameters of proposed BMPs. The evaluation may include the use of impermeable liners to reduce or eliminate the separation distances. Additionally, the evaluation shall at a minimum, address soil permeability, depth to bedrock, seasonal high water table, susceptibility for sinkhole formation, suitability of STORMWATER MANAGEMENT FACILITIES, subgrade stability and maximum infiltration capacity in depth of water per unit AREA.

**SECTION 402. STORMWATER MANAGEMENT PERFORMANCE STANDARDS**

- 1. General. The following general standards shall be applied to all REGULATED ACTIVITIES within the TOWNSHIP to promote flow and volume attenuation, water quality, EROSION and SEDIMENT Control and FLOOD control.
  - A. The APPLICANT of any PROJECT SITE in the TOWNSHIP that does not fall under the impervious credit or exemption criteria in Section 109 shall submit a STORMWATER MANAGEMENT PLAN application consistent with this ORDINANCE to the TOWNSHIP for review, approval and final recordation.
  - B. IMPERVIOUS SURFACE shall include, but not be limited to, any roof, decking, parking or driveway AREAs and any new streets and sidewalks. Any AREAs designed to initially be gravel or crushed stone or to be placed on gravel or crushed stone shall be assumed to be impervious.

2. VOLUME CONTROL.

VOLUME CONTROL BMPs are intended to maintain existing hydrologic conditions for SMALL STORM EVENTS by promoting GROUNDWATER RECHARGE and/or evapotranspiration as described in this Section. RUNOFF VOLUME CONTROLS shall be implemented using the *Design Storm Method* described in Subsection A and B below, or through continuous modeling approaches or other means as described in the BMP MANUAL.

A. The *Design Storm Method* is applicable to any size of REGULATED ACTIVITY. This method requires detailed modeling based onsite conditions.

(1) Do not increase the post-DEVELOPMENT total RUNOFF volume for all storms equal to or less than the two (2) year twenty-four (24) hour STORM EVENT.

B. For modeling purposes:

(1) Existing (pre-DEVELOPMENT) non-forested pervious AREAs must be considered meadow in good condition.

(2) When the existing PROJECT SITE contains IMPERVIOUS SURFACE, twenty percent (20) percent of existing IMPERVIOUS SURFACE to be disturbed shall be considered meadow in good condition in the model for EXISTING CONDITIONS.

3. Rate Control. Rate control for storms, up to the One-Hundred (100) Year STORM EVENT, is essential to protect against immediate downstream EROSION and FLOODING. The following shall apply:

A. Match Pre-DEVELOPMENT Hydrograph.

APPLICANTS shall provide INFILTRATION FACILITIES or utilize other techniques which will allow the post-DEVELOPMENT One-Hundred (100) Year hydrograph to match the pre-DEVELOPMENT One-Hundred (100) Year hydrograph, along all parts of the hydrograph, for the PROJECT SITE. To match the pre-DEVELOPMENT hydrograph, the post-DEVELOPMENT peak rate must be less than or equal to the pre-DEVELOPMENT peak rate, and the post-DEVELOPMENT RUNOFF volume must be less than or equal to the pre-DEVELOPMENT volume for the same STORM EVENT. A shift in hydrograph peak time of up to five (5) minutes and a rate variation of up to five (5) percent at a given time may be allowable to account for the timing affect of BMPs used to manage the peak rate and RUNOFF volume. VOLUME CONTROL volumes as given in Section 402.5 and Section 402.6 may be used as part of this option; or

B. Where the pre-DEVELOPMENT hydrograph cannot be matched, the calculated peak rates of RUNOFF for STORMWATER originating on the PROJECT SITE must meet the following conditions, for all WATERSHEDS flowing from the PROJECT SITE unless the pre-DEVELOPMENT hydrograph is not exceeded at all points in time:

- (1) The two (2) year post-DEVELOPMENT peak flow shall not exceed fifty (50) percent of the two (2) year pre-DEVELOPMENT peak flow.
  - (2) The five (5) year post-DEVELOPMENT peak flow shall not exceed fifty (50) percent of the five (5) year pre-DEVELOPMENT peak flow.
  - (3) The ten (10) year post-DEVELOPMENT peak flow shall not exceed fifty (50) percent of the ten (10) year pre-DEVELOPMENT peak flow.
  - (4) The twenty-five (25) year post-DEVELOPMENT peak flow shall not exceed fifty (50) of the twenty-five (25) year pre-DEVELOPMENT peak flow.
  - (5) The fifty (50) year post-DEVELOPMENT peak flow shall not exceed fifty (50) percent of the fifty (50) year pre-DEVELOPMENT peak flow.
  - (6) The One-Hundred (100) Year post-DEVELOPMENT peak flow shall not exceed fifty (50) percent of the One-Hundred (100) Year pre-DEVELOPMENT peak flow.
4. Storage facilities, including normally dry, open top facilities, shall completely drain the storage over a period of time not less than twenty-four (24) hours and not more than seventy-two (72) hours from the end of the DESIGN STORM.
  5. Any portion of the VOLUME CONTROL storage that meets the following criteria may also be used as rate control storage;
    - A. VOLUME CONTROL storage that depends on infiltration is designed according to the infiltration standards in this ORDINANCE.
    - B. The VOLUME CONTROL storage which will be used for rate control is that storage which is available within twenty-four (24) hours from the end of the DESIGN STORM based on the stabilized infiltration rate and/or the evapotranspiration rate.
  6. VOLUME CONTROL storage facilities designed to infiltrate shall avoid the least permeable HSGs at the PROJECT SITE.
  7. EROSION and SEDIMENTATION Controls are to be designed and maintained throughout the construction phase of the PROJECT SITE, as specified in Section 302.5.C.

**SECTION 403. METHODS OF CALCULATION OF RUNOFF**

1. Any STORMWATER RUNOFF calculations involving drainage AREAs greater than two hundred (200) acres and Time of Concentration ( $T_c$ ) greater than sixty (60) minutes, including on- and off-site AREAs, shall use generally accepted calculation techniques based on the NRCS SOIL-COVER COMPLEX METHOD.
2. STORMWATER RUNOFF from all PROJECT SITEs shall be calculated using the most appropriate method, given the site considerations and drainage characteristics associated

with the design.

- A. Table IV-1 summarizes acceptable computation methods. It is assumed that all methods will be selected by the design professional based on the individual limitations and suitability of each method for a particular PROJECT SITE.

**Table IV-1  
Acceptable Computation Methodologies for Stormwater Management Plans**

Method	Method Developed By	Applicability
TR-20 (or commercial computer package based on TR-20)	USDA NRCS	Applicable where use of full hydrology computer model is desirable or necessary.
TR-55 (or commercial computer package based on TR-55)	USDA NRCS	Applicable for land development plans within limitations described in TR-55.
HEC-1/HEC-HMS	US Army Corps of ENGINEERS	Applicable where use of full hydrologic computer model is desirable or necessary.
Rational method (or commercial computer package based on rational method)	Emil Kuichling (1889)	For project sites less than 200 acres, $T_c$ less than or equal to 60 min. or as approved by the Township.
EFH2 (Engineering Field Handbook, Chapter 2)	USDA NRCS	Applicable to rural and undeveloped AREAs subject to the Program Limits.
Other methods	Varies	Other methodologies approved by the Township.

- B. Rainfall amounts and intensity shall utilize published data based on the methodology selected for the WATERSHED being studied. In general the National Weather Service’s website [http://hdsc.nws.noaa.gov/hdsc/pfds/org/pa\\_pfds.html](http://hdsc.nws.noaa.gov/hdsc/pfds/org/pa_pfds.html) should be the source referred to for rainfall input.
- C. Hydrographs may be obtained from NRCS methods such as TR-55, TR20, or from use of the “modified” or “unit hydrograph” rational methods. If “modified” or “unit hydrograph” rational methods are used, the ascending leg of the hydrograph shall have a length equal to three (3) times the Time of Concentration( $3xT_c$ ) and the descending leg shall have a length equal to seven (7) times the Time of Concentration( $7xT_c$ ) to approximate an SCS Type II hydrograph.
- D. RUNOFF calculations shall include a hydrologic and hydraulic analysis indicating volume and velocities of flow and the GRADEs, sizes, and capacities of water

carrying structures, SEDIMENT BASINs, retention and detention structures and sufficient design information to construct such facilities. RUNOFF calculations shall also indicate both pre-DEVELOPMENT and post-DEVELOPMENT rates for PEAK DISCHARGE of STORMWATER RUNOFF from all discharge points from the PROJECT SITE.

- E. Criteria and assumptions to be used in the determination of STORMWATER RUNOFF and design of STORMWATER MANAGEMENT FACILITIES are as follows:
    - (1) RUNOFF coefficients shall be based on the information contained in the MTSMRM, if the actual land use is listed in the MTSMRM. If the actual land use is not listed in the MTSMRM, RUNOFF coefficients shall be chosen from other published documentation, and a copy of said documentation shall be submitted with the STORMWATER MANAGEMENT PLAN.
    - (2) For the purpose of calculating pre-DEVELOPMENT PEAK DISCHARGEs, all RUNOFF coefficients, both on-site and off-site, shall be based on actual land use assuming summer or good land conditions. RUNOFF coefficients for off-site discharges used to design facilities shall be based on actual land use assuming winter or poor land conditions.
    - (3) Times of concentration shall utilize the worksheet provided in the MTSMRM.
  - F. The APPLICANT may use STORMWATER credits for NON-STRUCTURAL BMPS in accordance with the BMP MANUAL. The allowable reduction will be determined by the TOWNSHIP or TOWNSHIP ENGINEER.
  - G. Peak rate control is not required for off-site RUNOFF. Off-site RUNOFF may be bypassed around the site provided all other discharge requirements are met. If off-site RUNOFF is routed through rate control facilities, RUNOFF coefficients for off-site discharges used to design those rate control facilities shall be based on actual land use assuming winter or poor land conditions.
3. Design Standards - General.
- A. All STORM SEWER PIPEs, CULVERTs, BRIDGEs, gutters, and SWALEs (excluding detention and retention basin outfall structures) conveying water originating only from within the boundaries of the PROJECT SITE shall be designed for a twenty-five (25) year STORM EVENT. All other STORM SEWER PIPEs, CULVERTs and BRIDGEs, gutters, and SWALEs (excluding detention and retention basin outfall structures and excluding sole access structures) conveying water originating from off-site shall be designed for a fifty (50) year STORM EVENT. Sole access structures shall be designed to convey the One-Hundred (100) Year STORM EVENT without roadway overtopping. Drainage and ACCESS EASEMENTs shall be provided to encompass the water surface limits of the One-Hundred (100) Year STORM EVENT throughout the PROJECT SITE and to provide access from a public street to the STORMWATER Facility. Easements shall begin at the furthest upstream property line of the proposed DEVELOPMENT in a WATERSHED.



- B. The maximum water depth for aboveground storage facilities shall not exceed six (6) feet measured at the emergency spillway design water surface.
- C. INLETs shall not be placed in AREAs other than streets and PARKING LOTs, unless otherwise approved by the TOWNSHIP.
- D. Water carrying facilities, roof drains, and sump pump discharges shall not directly discharge water into a street right-of-way, sanitary sewer, STORM SEWER or roadside gutter. Roof leader and sump pump discharge piping shall terminate at least five (5) feet beyond the exterior foundation wall of any structure, but no closer than ten (10) feet from a property line or the street right-of-way line.
- E. All existing and natural WATERCOURSEs, CHANNELs, drainage systems, WETLANDs, and AREAs of surface water concentration shall be maintained in their existing condition unless an ALTERATION is approved by the TOWNSHIP and any other necessary approving body.
- F. Flow velocities from any STORM SEWER may not result in EROSION of the receiving CHANNEL.
- G. Adequate EROSION protection shall be provided along all OPEN CHANNELs and at all points of discharge.
- H. The following conditions shall be met for all SWALEs:
  - (1) Capacities and velocities shall be computed using the MANNING EQUATION. The minimum design parameters shall be as follows:
    - (a) For vegetated SWALEs two design considerations shall be met:
      - [i] The first shall consider CHANNEL velocity and stability based upon a low degree of retardance ("n" of 0.03);
      - [ii] The second shall consider CHANNEL capacity based upon a high degree of retardance ("n" of 0.05). All vegetated SWALEs shall have a minimum slope of one (1) percent unless otherwise approved by the TOWNSHIP ENGINEER.
    - (b) The "n" factors to be used shall be chosen from the MTSMRM.
- I. All STORMWATER structures INLETs and OUTLETs smaller than a forty-eight (48) inch equivalent diameter which convey STORMWATER from residential LOTs to a street or from a street to residential LOTs shall extend from the street right-of-way a minimum distance of 2/3 the length of the longest adjacent LOT dimension.
- J. STORMWATER MANAGEMENT FACILITIES not located within a public right-of-way shall be contained in and centered within a DRAINAGE EASEMENT. Easements shall follow property boundaries where possible.
- K. The last downstream structure, prior to the CONVEYANCE system leaving the public right-of-way, shall have a one (1) foot sump created below the exiting PIPE's

invert. All other STORM SEWER manholes and INLETs shall have smooth flow lines grouted as shown in the MTISM.

- L. Headwalls and endwalls shall be used where STORMWATER RUNOFF enters or leaves the STORM SEWER horizontally from a natural or man-made CHANNEL. PennDOT Type “DW” headwalls and endwalls shall be utilized for PIPEs twelve (12) inches and larger in diameter. End sections shall be utilized for PIPEs smaller than twelve (12) inches in diameter.
4. Design Standards - Facilities within the public street right-of-way.
- A. STORM SEWER PIPEs, other than those used for street subbase underdrains shall have a minimum diameter of fifteen (15) inches. Structural calculations that address the actual design requirements will be required where installation conditions merit.
  - B. STORM SEWER PIPEs and CULVERTs shall be installed with a minimum slope of one-half (0.5) percent.
  - C. Allowable PIPE, CULVERT, and BRIDGE materials shall be as outlined in the MTISM.
  - D. All STORM SEWER crossings of streets shall not deviate by more than fifteen (15) degrees from perpendicular to the street centerline.
  - E. All STORM SEWER PIPE and CULVERTs shall be laid to a minimum depth of twelve (12) inches from finished subgrade to the crown of PIPE in paved AREAs and twelve (12) inches from finished GRADE to the crown of the PIPE in grassed AREAs.
  - F. Curves or angle points in PIPEs or box CULVERTs without the use of an INLET or manhole are prohibited unless pre-approved by the TOWNSHIP. Tee joints, elbows, and wyes shall be limited for use in constructing underground DETENTION BASINs, underground retention basins, underdrain systems, and roof leader collection systems.
  - G. Manholes, INLETs, headwalls, endwalls and end sections shall conform to the requirements of the PennDOT, Publication 408, as modified by the adopted TOWNSHIP standards found in the MTISM.
  - H. INLETs shall be placed on both sides of the street at low spots, at a maximum of 600 feet apart along a STORM SEWER PIPE or CULVERT, at points of abrupt changes in the horizontal or vertical directions of STORM SEWERs. INLETs shall normally be along the curblines at, or beyond the curb radius points. Within the street right-of-way, the gutter spread based on the twenty-five (25) year STORM EVENT shall be no greater than one-half (1/2) of the travel lane width and have a maximum depth of three (3) inches at the curb line. A parking lane shall not be considered as part of the travel lane. In the absence of pavement markings separating a travel lane from the parking lane, the parking lane shall be assumed to be eight (8) feet wide if parking is permitted on the street. INLETs shall be depressed two (2) inches below the GRADE of the gutter or ground surface for streets with a cartway width greater than twenty-

eight (28) feet. INLETs shall not be depressed for streets having a cartway width of twenty-eight (28) feet or less. At intersections and access driveways, the depth of flow across the through streets and across the access driveways (proposed and existing) shall not exceed one and one-half (1-1/2) inch for the twenty-five (25) year STORM EVENT. Manholes may be substituted for INLETs at locations where INLETs are not required to handle surface RUNOFF.

- I. Placement or use of BMPs within the public street right-of-way shall only be allowed after TOWNSHIP approval.
5. Design Standards - Facilities outside of the public street right-of-way.
    - A. The design of all BMP facilities shall incorporate best engineering practices. The design ENGINEER shall utilize all available design criteria in the BMP MANUAL to meet the requirements of this ORDINANCE and shall provide all the necessary backup documentation with their submittal.
    - B. The BMPs must be designed to protect and maintain existing uses (e.g., drinking water use; cold water fishery use) and maintain the level of Water Quality necessary to protect those uses in all streams, and to protect and maintain Water Quality in "Special Protection" streams, as required by statewide regulations at 25 Pa. Code Chapter 93 .
    - C. To control post-CONSTRUCTION STORMWATER impacts from REGULATED EARTH DISTURBANCE ACTIVITIES, STATE WATER QUALITY REQUIREMENTS can be met by BMPs, including site design, which provide for replication of pre-CONSTRUCTION STORMWATER infiltration and RUNOFF conditions, so that post-CONSTRUCTION STORMWATER discharges do not degrade the physical, chemical, or biological characteristics of the receiving waters.
    - D. PADEP has regulations that require municipalities to ensure that design, implementation and maintenance of BMPs that control RUNOFF from new DEVELOPMENT and REDEVELOPMENT after REGULATED EARTH DISTURBANCE ACTIVITIES are complete. These requirements include the need to implement post-CONSTRUCTION STORMWATER BMPs with assurance of long-term operations and maintenance of those BMPs.
    - E. No REGULATED EARTH DISTURBANCE ACTIVITIES within the TOWNSHIP shall commence until approval by the TOWNSHIP of a plan that demonstrates compliance with STATE WATER QUALITY REQUIREMENTS after CONSTRUCTION is complete.
  6. ONE-HUNDRED (100) YEAR FLOODPLAIN delineation.
    - A. The ONE-HUNDRED (100) YEAR FLOODPLAIN must be determined and delineated on all plans in accordance with The Floodplain Ordinance of Manheim Township.
    - B. The lowest floor elevation of all new CONSTRUCTION and substantial IMPROVEMENTS to buildings and structures shall be in accordance with The

Floodplain Ordinance of Manheim Township.

- C. The boundaries of the ONE-HUNDRED (100) YEAR FLOODPLAIN must be field staked prior to any CONSTRUCTION.
  - D. STORMWATER MANAGEMENT FACILITIES located within or affecting the FLOODPLAIN or any WATERCOURSE shall also be subject to the requirements of The Floodplain Ordinance of Manheim Township, The Zoning Ordinance of Manheim Township, and any ordinance which regulates CONSTRUCTION and DEVELOPMENT within AREAs of the TOWNSHIP subject to FLOODING, and any other applicable requirements of the FLOODPLAIN MANAGEMENT ACT.
7. RIPARIAN BUFFER and RIPARIAN FOREST BUFFER delineation.
- A. In order to protect and improve water quality, a RIPARIAN BUFFER or RIPARIAN FOREST BUFFER shall be delineated on the plan and protected by an easement. The RIPARIAN BUFFER EASEMENT or RIPARIAN FOREST BUFFER EASEMENT shall be recorded as part of any subdivision or land DEVELOPMENT or STORMWATER MANAGEMENT PLAN that encompasses a RIPARIAN BUFFER or RIPARIAN FOREST BUFFER.
  - B. Except as otherwise required by 25 Pa. Code CHAPTER 102, the RIPARIAN BUFFER EASEMENT or RIPARIAN FOREST BUFFER EASEMENT shall be measured to be the greater of the limit of the ONE-HUNDRED (100) YEAR FLOODPLAIN or fifty (50) feet from the TOP OF STREAMBANK (on each side).
  - C. Minimum Management Requirements for RIPARIAN BUFFERS.
    - (1) Existing NATIVE VEGETATION shall be protected and maintained within the RIPARIAN BUFFER EASEMENT and RIPARIAN FOREST BUFFER EASEMENT.
    - (2) INVASIVE VEGETATION shall be actively removed and the RIPARIAN BUFFER and RIPARIAN FOREST BUFFER shall be planted with native trees, shrubs and other vegetation to create a diverse native plant community appropriate to the intended ecological context of the site.
  - D. The RIPARIAN BUFFER EASEMENT or RIPARIAN FOREST BUFFER EASEMENT shall be enforceable by the TOWNSHIP and shall be recorded in the Lancaster County Recorder of Deeds Office, so that it shall run with the land and shall limit the use of the property located therein.
  - E. Any permitted use within the RIPARIAN BUFFER EASEMENT or RIPARIAN FOREST BUFFER EASEMENT shall be conducted in a manner that will maintain the extent of the existing ONE-HUNDRED (100) YEAR FLOODPLAIN, improve or maintain the stream stability, and preserve and protect the ecological function of the FLOODPLAIN and shall comply the requirements of The Floodplain Ordinance of Manheim Township and The Zoning Ordinance of Manheim Township.

- F. The following conditions shall apply when public or private non-motorized recreation trails are permitted within RIPARIAN BUFFERS and RIPARIAN FOREST BUFFERS:
    - (1) Trails shall be designed to have the least impact on native plant species and other sensitive environmental features.
  - G. Septic drainfields and sewage disposal systems shall not be permitted within the RIPARIAN BUFFER EASEMENT or RIPARIAN FOREST BUFFER EASEMENT and shall comply with setback requirements established under 25 Pa. Code Chapter 73.
8. Design Standards - EROSION and SEDIMENT Control.
- A. All EARTH DISTURBANCE ACTIVITIES shall be conducted in such a way as to minimize ACCELERATED EROSION and resulting SEDIMENTATION. Measures to control EROSION and SEDIMENTATION shall, at a minimum, meet the standards of the CONSERVATION DISTRICT and 25 Pa. Code CHAPTER 102.
  - B. The PADEP has regulations that require an EROSION AND SEDIMENT CONTROL PLAN for any EARTH DISTURBANCE ACTIVITY of 5,000 square feet or more, under 25 Pa. Code § 102.4(b).
  - C. In addition, under 25 Pa. Code Chapter 92, a PADEP "NPDES CONSTRUCTION Activities" permit is required for any REGULATED EARTH DISTURBANCE ACTIVITY. This includes earth disturbance on any portion of, part of, or during and stage of, a larger plan of DEVELOPMENT.
  - D. The EROSION AND SEDIMENTATION CONTROL PLAN and any required permit, as required by PADEP regulations, must be available at all times at the PROJECT SITE. When required, a permit allowing EARTH DISTURBANCE ACITIVITIES shall be obtained by the APPLICANT before any CONSTRUCTION on the PROJECT SITE shall begin.
  - E. The EROSION AND SEDIMENTATION CONTROL PLAN shall be submitted by the APPLICANT to the CONSERVATION DISTRICT for their review and approval. No REGULATED EARTH DISTURBANCE ACTIVITIES within the TOWNSHIP shall commence until the EROSION AND SEDIMENTATION CONTROL PLAN is reviewed and approved by the CONSERVATION DISTRICT.
  - F. EROSION and SEDIMENTATION Controls are to be designed and maintained throughout the construction phase of the PROJECT SITE, as specified in Section 302.5.C.
  - G. Evidence of any necessary permit(s) for any REGULATED EARTH DISTURBANCE ACTIVITIES from the appropriate PADEP regional office or the CONSERVATION DISTRICT must be provided to the TOWNSHIP.

**ARTICLE V. COMPLETION OF IMPROVEMENTS OR GUARANTEE THEREOF**

**SECTION 501. GENERAL**

No DEVELOPMENT shall be considered in compliance with this ORDINANCE until the STORMWATER MANAGEMENT FACILITIES, and other IMPROVEMENTS and common amenities, have been installed in accordance with this ORDINANCE and the approved STORMWATER MANAGEMENT PLAN.

**SECTION 502. STAND-ALONE STORMWATER MANAGEMENT PLAN**

1. The APPLICANT shall provide FINANCIAL SECURITY to the TOWNSHIP to assure the timely installation and proper CONSTRUCTION of all STORMWATER MANAGEMENT FACILITIES including but not limited to EROSION and SEDIMENT Control measures and BMPs as required by the approved STORMWATER MANAGEMENT PLAN and this ORDINANCE. The posting and administration of FINANCIAL SECURITY to guarantee the completion of required IMPROVEMENTS and common amenities shall comply with the provisions of this Section, the MPC and other applicable laws of the Commonwealth.
2. All FINANCIAL SECURITY shall be prepared by the APPLICANT in the form required by the TOWNSHIP and in a form and content acceptable to the Solicitor for the TOWNSHIP. The amount of the security shall be calculated in accordance with Article V of the MPC. The following are acceptable forms of security. All other forms of security shall be individually approved by the TOWNSHIP.
  - A. Letter of credit. A letter of credit provided by the APPLICANT from a financial institution or other reputable institution subject to the approval of the TOWNSHIP. This letter shall be deposited with the TOWNSHIP and shall certify the following:
    - (1) That the creditor does guarantee funds in an amount equal to one hundred ten (110) percent of the cost of completing all required IMPROVEMENTS.
    - (2) In case of failure on the part of the APPLICANT to complete the specified IMPROVEMENTS within the required time period or notification by the financial institution that the letter of credit will not be renewed, the creditor shall pay to the TOWNSHIP immediately, and without further action, such funds as are necessary to finance the completion of those IMPROVEMENTS, up to the limit of credit stated in the letter.
    - (3) The letter of credit may not be withdrawn, or reduced in amount, until released by the TOWNSHIP.
  - B. Surety performance bond. A security bond from a surety bonding company authorized to do business in the Commonwealth of Pennsylvania. The bond shall be payable and in a form acceptable to the TOWNSHIP.
  - C. Escrow account. A deposit of cash with the TOWNSHIP or in escrow with a financial institution. The use of a financial institution for establishing an escrow account shall be subject to approval by the TOWNSHIP. In the case of an escrow account, the APPLICANT shall file with the TOWNSHIP an agreement between the financial institution and himself guaranteeing the following:

- (1) That the funds of said escrow account shall be held in trust until released by the TOWNSHIP, as appropriate, and may not be used or pledged by the APPLICANT as security in any other manner during that period.
  - (2) In the case of a failure on the part of the APPLICANT to complete said IMPROVEMENTS, then the institution shall immediately make the funds in said account available to the TOWNSHIP for use in the completion of those IMPROVEMENTS.
3. As the work of installing the required IMPROVEMENTS proceeds, the party posting the FINANCIAL SECURITY may request the COMMISSIONERS to authorize the release of such portions of the FINANCIAL SECURITY associated with the completed IMPROVEMENTS. Requests for the partial release of FINANCIAL SECURITY as the work of installing the required IMPROVEMENTS proceeds shall be made and governed by the MPC.
4. At such time that the APPLICANT has completed and installed the required IMPROVEMENTS, the COMMISSIONERS shall consider the APPLICANT's request for a release from the improvement guarantee in accordance with the procedure set forth in the MPC.
5. At the completion of the project, and as prerequisite for the release of the FINANCIAL SECURITY, the APPLICANT shall provide Record Plans in accordance with Section 302.11.
6. Upon receipt of the Record Plans and prior to release of the remaining FINANCIAL SECURITY per Section 502.4, the TOWNSHIP shall conduct a final inspection to certify compliance with this ORDINANCE.
7. In the event that any IMPROVEMENTS which are required by this ORDINANCE have not been installed as provided in this ORDINANCE or in accordance with the approved STORMWATER MANAGEMENT PLAN, the TOWNSHIP may enforce any corporate bond or other security by appropriate legal and equitable remedies. If proceeds of such bond or other security are insufficient to pay the cost of installing or making repairs or corrections to all the IMPROVEMENTS covered by said security, the COMMISSIONERS may, at their option, install part of such IMPROVEMENTS in all or part of the STORMWATER MANAGEMENT PLAN and may institute appropriate legal or equitable action to recover the monies necessary to complete the remainder of the IMPROVEMENTS.

**SECTION 503. STORMWATER MANAGEMENT PLAN COMBINED WITH SUBDIVISION OR LAND DEVELOPMENT**

STORMWATER MANAGEMENT FACILITIES shall be completely installed prior to final plan approval unless the APPLICANT submits proper FINANCIAL SECURITY with the application for final approval in accordance with the requirements of Subdivision and Land Development Ordinance of Manheim Township. The determination of the amount of FINANCIAL SECURITY required, permissible forms of FINANCIAL SECURITY, procedure for release of FINANCIAL SECURITY, regulations for FINANCIAL SECURITY governing staged DEVELOPMENT, inspection of IMPROVEMENTS during CONSTRUCTION and final inspection of IMPROVEMENTS shall be as set forth in The Manheim Township Subdivision and Land

Development Ordinance.



**ARTICLE VI. OPERATION AND MAINTENANCE OF FACILITIES**

**SECTION 601. OPERATION AND MAINTENANCE RESPONSIBILITIES**

1. The STORMWATER MANAGEMENT PLAN for the PROJECT SITE shall contain an O&M PLAN prepared by the APPLICANT and approved by the TOWNSHIP providing for the necessary and proper operation and maintenance of all STORMWATER MANAGEMENT FACILITIES and EROSION and SEDIMENTATION Control Facilities. The O&M PLAN along with the required STORMWATER MANAGEMENT Agreement and Declaration of Easement document shall be recorded at the Lancaster County Recorder of Deeds office.
2. The STORMWATER MANAGEMENT PLAN for the PROJECT SITE shall establish responsibilities for the continuing operating and maintenance of all proposed STORMWATER MANAGEMENT FACILITIES, including BMPs, consistent with the following principals:
  - A. If the TOWNSHIP elects to accept dedication of streets, the TOWNSHIP is under no obligation to accept STORMWATER MANAGEMENT FACILITIES located outside of the public right-of-way.
  - B. If a PROJECT SITE is to be maintained in single ownership or if other IMPROVEMENTS are to be privately owned and maintained, then the operation and maintenance of STORMWATER MANAGEMENT FACILITIES shall be the responsibility of the owner, lessee, private management entity, or any other parties in interests.
  - C. The TOWNSHIP is exempt from the requirement to sign and record an O&M PLAN.
3. The O&M PLAN shall be subject to the review and approval of the TOWNSHIP Solicitor and COMMISSIONERS.
  - A. The following shall be addressed in the O&M PLAN:
    - (1) Description of maintenance requirements, including, but not limited to, the following:
      - (a) Regular inspection of the STORMWATER MANAGEMENT FACILITIES. To assure proper implementation of BMPs, maintenance and care of STORMWATER MANAGEMENT BMPs should be inspected by a qualified person, which may include the landowner, or the owner's DESIGNEE (including the TOWNSHIP for dedicated and owned facilities), according to the following minimum frequencies:
        - [i] Annually for the first five (5) years.
        - [ii] Once every three (3) years thereafter.
        - [iii] During or immediately after the cessation of a ten (10) year or greater STORM EVENT. A ten (10) year STORM EVENT is defined as rainfall exceeding five (5) inches in a twenty-four (24) hour period.
        - [iv] As specified in the O&M PLAN pursuant to this Article.

- (b) All PIPES, SWALEs and detention facilities shall be kept free of any debris or other OBSTRUCTION and in original design condition.
  - (c) Removal of silt from all permanent structures which trap silt or SEDIMENT in order to keep the material from building up in grass waterways, PIPES, detention or retention basins, infiltration structures, or BMPs, and thus reducing their capacity to convey or store RUNOFF.
  - (d) Re-establishment of vegetation of scoured AREAs or AREAs where vegetation has not been successfully established. Selection of seed mixtures shall be subject to approval by the TOWNSHIP.
4. RIPARIAN BUFFER and RIPARIAN FOREST BUFFER management plan prepared in accordance with 25 Pa. Code CHAPTER 102 §14(b)(4) if required.
  5. Identification of a responsible individual, corporation, association or other entity for ownership, operation and maintenance of both temporary and permanent STORMWATER MANAGEMENT and EROSION and SEDIMENTATION Control Facilities.

**SECTION 602. MAINTENANCE OF STORMWATER MANAGEMENT FACILITIES DURING DEVELOPMENT**

1. The landowner, successor and assigns shall maintain all STORMWATER MANAGEMENT FACILITIES in good working order in accordance with the approved O&M PLAN.
2. The landowner shall keep on file with the TOWNSHIP, the name, address and telephone number of the person or company responsible for maintenance activities. In the event of a change, new information shall be submitted to the TOWNSHIP within ten (10) days of the change.

**SECTION 603. MAINTENANCE OF FACILITIES ACCEPTED BY THE TOWNSHIP**

1. If the COMMISSIONERS accept dedication for all or some of the required STORMWATER MANAGEMENT FACILITIES following completion, the COMMISSIONERS may require the posting of FINANCIAL SECURITY to secure structural integrity of said facilities as well as the functioning of said facilities in accordance with the design and specifications as depicted on the approved STORMWATER MANAGEMENT PLAN a term of eighteen (18) months from the date of acceptance of dedication. Said FINANCIAL SECURITY shall be the same type as required in Article V with regard to installation of such facilities, and the amount of the FINANCIAL SECURITY shall not exceed fifteen (15) percent of the actual cost of installation of said facilities.

**SECTION 604. MAINTENANCE AGREEMENT FOR PRIVATELY OWNED STORMWATER MANAGEMENT FACILITIES**

1. Prior to final approval of the PROJECT SITE's STORMWATER MANAGEMENT PLAN, the APPLICANT shall sign and record at the Lancaster County Recorder of Deeds Office, an O&M PLAN covering all STORMWATER MANAGEMENT FACILITIES including

RIPARIAN BUFFERS and RIPARIAN FORESTED BUFFERS that are to be privately owned. The O&M PLAN along with the STORMWATER MANAGEMENT Agreement and Declaration of Easement document shall be recorded as a restrictive covenant agreement that runs with the land. The agreement shall stipulate the following:

- A. The owner, successor and assigns shall maintain all STORMWATER facilities in accordance with the approved O&M PLAN and shall keep all facilities in a safe and attractive manner in accordance with the approved O&M PLAN and STORMWATER MANAGEMENT Agreement and Declaration of Easement document.
  - B. The owner shall grant the right to the TOWNSHIP to use easements and rights-of-way to assure access for periodic inspections by the TOWNSHIP and maintenance, if required.
  - C. The owner shall keep on file with the TOWNSHIP the name, address, and telephone number of the person or company responsible for maintenance of both temporary and permanent STORMWATER MANAGEMENT FACILITIES, in the event of a change, new information shall be submitted to the TOWNSHIP within ten (10) days of the change.
  - D. Enumerate permanent STORMWATER MANAGEMENT FACILITIES as permanent real estate appurtenances and record as deed restrictions or easements that run with the land.
  - E. If the owner fails to maintain the STORMWATER MANAGEMENT FACILITIES following due notice by the TOWNSHIP to correct the problem(s), the TOWNSHIP may perform the necessary maintenance work or corrective work and the owner shall reimburse the TOWNSHIP for all reasonable costs. Failure to reimburse the TOWNSHIP may lead to a lien being placed against any or all properties that utilize the facility.
2. Other items may be included in the O&M PLAN, STORMWATER MANAGEMENT Agreement and Declaration of Easement document where determined necessary to guarantee the satisfactory maintenance of all STORMWATER MANAGEMENT FACILITIES. The O&M PLAN along with the STORMWATER MANAGEMENT Agreement and Declaration of Easement document shall be subject to the review and approval of the TOWNSHIP solicitor and TOWNSHIP.

#### **SECTION 605. MAINTENANCE OF EXISTING FACILITIES/BMPS**

1. STORMWATER MANAGEMENT FACILITIES existing on the effective date of this ORDINANCE on individual LOTS that have not been accepted by the TOWNSHIP or for which operation and maintenance responsibilities have not been assumed by a private entity such as a homeowners' association shall be maintained by the individual property owners. Such maintenance shall include at a minimum those items set forth in Section 601.3. If the TOWNSHIP determines at any time that any permanent STORMWATER MANAGEMENT FACILITY has been eliminated, altered, blocked through the erection of structures or the deposit of materials, or improperly maintained, the condition constitutes a nuisance and shall notify the property owner of corrective measures that are required, and

provide for a reasonable period of time, not to exceed thirty (30) days, within which the property owner shall take such corrective action. If the property owner does not take the required corrective action, the TOWNSHIP may either perform the work or contract for the performance for the work or bill the property owner for the cost of the work plus a penalty of ten (10) percent of the cost of the work. If such bill is not paid by the property owner within thirty (30) days, the TOWNSHIP may file a municipal claim against the property upon which the work was performed in accordance with the applicable laws.

2. No person shall modify, remove, FILL, landscape or alter STORMWATER MANAGEMENT FACILITIES or BMPs that have been installed on a property unless all necessary plan approvals and permits have been obtained to permit such MODIFICATION, removal, FILLING, landscaping or ALTERATION. No person shall place any structure, FILL, landscaping, or vegetation in a STORMWATER MANAGEMENT FACILITY or within a DRAINAGE or ACCESS EASEMENT.

#### **SECTION 606. RIGHT OF ENTRY ONTO PRIVATE PROPERTY**

Upon presentation of proper credentials, duly authorized representatives of the TOWNSHIP may enter, at reasonable times, upon any property, within the TOWNSHIP, to investigate or ascertain the condition of the subject property in regard to any aspect regulated by this ORDINANCE.

#### **SECTION 607. REVISIONS TO STORMWATER MANAGEMENT FACILITIES**

A revision which involves a change in STORMWATER MANAGEMENT Control methods or techniques, or which involves the relocation or redesign of control measures, or which is necessary because soil or other conditions are not as stated on the approved plan, shall require a resubmission by the APPLICANT in accordance with the plan requirements as set forth in Section 301.

## **ARTICLE VII. PROHIBITION AGAINST NON-STORMWATER DISCHARGES**

### **SECTION 701. PROHIBITED DISCHARGES**

1. No person shall allow, or cause to allow, STORMWATER discharges into the WATERS OF THE COMMONWEALTH or the MS4 which are not comprised entirely of STORMWATER, except (1) as provided in Subsection B of this Section, and (2) discharges allowed under a state or federal permit.
2. Discharges which may be allowed based on a finding by the TOWNSHIP that the discharge(s) do not significantly contribute to pollution to surface WATERS OF THE COMMONWEALTH, are:
  - A. Discharges or flows from fire fighting activities.
  - B. Potable water sources including dechlorinated water line and fire hydrant flushing, provided such discharges contain less than 0.1 mg/L of free chlorine.
  - C. Non-contaminated irrigation drainage, water from lawn maintenance and landscape drainage.
  - D. Routine external building wash down (which does not use detergents or other compounds).
  - E. Water from individual residential car washing where cleaning agents are not utilized.
  - F. Diverted stream flows and springs.
  - G. Non-contaminated water from crawl space pumps.
  - H. Non-contaminated pumped groundwater and water from foundation or from footing drains.
  - I. Non-contaminated HVAC condensation and water from geothermal systems.
  - J. Non-contaminated hydrostatic test water discharges, provided such discharges contain less than 0.1 mg/L of free chlorine.
  - K. Flows from riparian habitats and WETLANDs.
  - L. Dechlorinated swimming pool discharges provided the discharge does not leave the property boundary and provided such discharges contain less than 0.1 mg/L of free chlorine.
  - M. Rising groundwater.
3. In the event that the TOWNSHIP determines that any of the discharges identified in Subsection B of this Section significantly contribute to pollution of WATERS OF THE COMMONWEALTH, or is so notified by PADEP, the TOWNSHIP will notify the responsible person to cease the discharge.
4. Upon notice provided by the TOWNSHIP under Subsection C of this Section, the discharger will have a reasonable time, as determined by the TOWNSHIP, to cease the discharge consistent with the degree of pollution caused by the discharge.

5. Nothing in this Section shall affect a discharger's responsibilities under state law.

**SECTION 702. PROHIBITED CONNECTIONS**

The following connections are prohibited, except as provided in Section 701:

1. Any drain or CONVEYANCE, whether on the surface or subsurface, which allows any non-STORMWATER discharge including sewage, process wastewater, and wash water, to enter the MS4 or WATERS OF THE COMMONWEALTH, and any connections to the STORMWATER MANAGEMENT FACILITIES from indoor drains and sinks; and
2. Any drain or CONVEYANCE connected from a nonresidential land use to the MS4 which has not been documented in plans, maps, or equivalent records, and approved by the TOWNSHIP.

**ARTICLE VIII. ADMINISTRATION**

**SECTION 801. MODIFICATIONS**

1. The provisions of this ORDINANCE related to water quality are the minimum water quality standards and the COMMISSIONERS are not permitted to alter these minimum standards or grant relief from these standards.
2. The provisions of this ORDINANCE not related to water quality are the minimum standards for the protection of the public health, safety and welfare.
3. If any mandatory provision of this ORDINANCE not related to water quality is shown by the APPLICANT, to the satisfaction of the COMMISSIONERS at a scheduled public meeting, to be unreasonable and to cause unique and undue hardship or that the alternate proposal will allow for equal or better results, as it applies to the APPLICANT's proposed subdivision, land DEVELOPMENT or STORMWATER MANAGEMENT PLAN the COMMISSIONERS upon obtaining the comments and recommendations of the TOWNSHIP or TOWNSHIP ENGINEER, may grant a MODIFICATION, in writing, to such APPLICANT for such mandatory provision not related to water quality, so that substantial justice may be done and the public interest secured; provided that such MODIFICATION will not have the effect of nullifying the intent and purpose of this ORDINANCE.
4. All requests for a MODIFICATION shall be in writing and shall accompany and be a part of the application for DEVELOPMENT. The request shall state in full, the grounds and facts, of unreasonableness or hardship on which the request is based, the provision or provisions of the ORDINANCE involved and the minimum MODIFICATION necessary.
5. The COMMISSIONERS shall keep a written record of all action on all MODIFICATION requests.
6. In granting MODIFICATIONs from the provisions of this ORDINANCE, the COMMISSIONERS may impose conditions that will, in its judgment; secure substantially the objectives of the standards or requirements so modified.
7. The list of such MODIFICATIONs, along with the date of approval shall be included on the plan.
8. This Section does not apply during an enforcement action.

**SECTION 802. AMENDMENT**

The COMMISSIONERS may, from time to time, amend this ORDINANCE by appropriate action taken at a scheduled public meeting. Amendments to the ORDINANCE shall be advertised and enacted in accordance with the MPC and First Class Township Code.

**SECTION 803. ERRONEOUS PERMIT**

Any permit or authorization issued or approved based on false, misleading or erroneous information provided by an APPLICANT is void without the necessity of any proceedings for revocation. Any work undertaken or use established pursuant to such permit or other

authorization is unlawful. No action may be taken by a board, agency or employee of the TOWNSHIP purporting to validate such a violation.

#### **SECTION 804. VIOLATIONS**

It shall be a violation of this ORDINANCE to commit or permit any other person to commit any of the following acts:

1. To commence REGULATED ACTIVITIES for which this ORDINANCE requires a permit prior to obtaining a permit or in violation of the terms or conditions of any permit issued under this ORDINANCE.
2. To install, repair, modify or alter STORMWATER MANAGEMENT FACILITIES prior to obtaining a permit under this ORDINANCE, or, in a manner which violates the terms and conditions of any permit issued under this ORDINANCE.
3. To misuse or fail to maintain any STORMWATER MANAGEMENT FACILITY installed upon a property.
4. To construct any IMPROVEMENTS upon, GRADE, FILL or take any other action which will impair the proper functioning of any STORMWATER MANAGEMENT FACILITY.
5. To place false information on, or, omit relevant information from an application for a permit under this ORDINANCE.
6. To fail to comply with any other provisions of this ORDINANCE.

#### **SECTION 805. ENFORCEMENT**

The COMMISSIONERS are hereby authorized and directed to enforce all of the provisions of this ORDINANCE.

1. Any permit or approval issued by the TOWNSHIP pursuant to this ORDINANCE may be suspended by the TOWNSHIP for:
  - A. Noncompliance with or failure to implement any provision of the approved STORMWATER MANAGEMENT PLAN, O&M PLAN or STORMWATER MANAGEMENT Agreement and Declaration of Easement document.
  - B. A violation of any provisions of this ORDINANCE or any other applicable law, ORDINANCE, rule, or regulation relating to the REGULATED ACTIVITY.
  - C. The creation of any condition or the commission of any act during CONSTRUCTION or DEVELOPMENT that constitutes or creates a hazard, nuisance, pollution or endangers the life or property of others.
  - D. When any other required permit is allowed to lapse prior to satisfying all requirements of the STORMWATER MANAGEMENT PLAN.
2. A suspended permit may be reinstated by the TOWNSHIP when:



- A. The TOWNSHIP has inspected and approved the corrections to the violation that caused the suspension;
  - B. The TOWNSHIP is satisfied that the violation has been corrected.
3. Any permit or approval may be withheld by the TOWNSHIP when other permits are suspended.

**SECTION 806. NOTIFICATION**

1. In the event that any person fails to comply with the requirements of this ORDINANCE, or fails to conform to the requirements of any permit issued hereunder, the TOWNSHIP may order compliance by written notice to the responsible person. Such notice may require without limitation:
- A. The performance of monitoring, analyses, and reporting;
  - B. The elimination of prohibited discharges;
  - C. Cessation of any violating discharges, practices, or operations;
  - D. The abatement or remediation of STORMWATER pollution or contamination hazards and the restoration of any affected property;
  - E. Payment of a fine to cover administrative and remediation costs;
  - F. The implementation of STORMWATER BMPs; and
  - G. Operation and maintenance of STORMWATER BMPs.
2. Such notification shall set forth the nature of the violation(s) and establish a reasonable time limit for correction of these violation(s). Failure to comply within the time specified shall subject each person to the penalty provisions of this ORDINANCE. All such penalties shall be deemed cumulative and shall not preclude the TOWNSHIP from pursuing any and all other remedies.

**SECTION 807. VIOLATIONS AND PENALTIES; REMEDIES FOR VIOLATION**

1. For each violation of the provisions of this ORDINANCE, the owner, agent, lessee, or contractor or any other person who commits, takes part in, or assists in any such violation shall be liable upon conviction thereof in a summary proceeding to pay a fine of not more than \$300 for each offense, together with the costs of prosecution. Each day or portion thereof in which a violation exists shall be considered a separate violation of this ORDINANCE, and each Section of this ORDINANCE which is violated shall be considered a separate violation.
2. The TOWNSHIP may also institute suits to restrain, prevent, or abate a violation of this ORDINANCE in equity or at law. Such proceedings in equity or at law may be initiated before any court of competent jurisdiction. In cases of emergency where, in the opinion of the court, the circumstances of the case require immediate abatement of the unlawful conduct, the court may, in its decree, fix a reasonable time during which the person

responsible for the unlawful conduct shall correct or abate the same. The expense of such proceedings shall be recoverable from the violator in such manner as may now or hereafter be provided by law.

#### **SECTION 808. MUNICIPAL LIABILITY**

Except as specifically provided by Act 167, the making of any administrative decision by the TOWNSHIP or any of its officials or employees shall not constitute a representation, guarantee or warranty of any kind by the TOWNSHIP of the practicability or safety of any proposed structure or use with respect to damage from EROSION, SEDIMENTATION, STORMWATER RUNOFF, FLOOD, or any other matter, and shall create no liability upon or give rise to any cause of action against the TOWNSHIP and its officials and employees. The COMMISSIONERS, by enacting this ORDINANCE, does not waive or limit any immunity granted to the TOWNSHIP and its officials and employees by the Governmental Immunity Act, 42 Pa. C.S. § 8541 et seq., and does not assume any liabilities or obligations.

#### **SECTION 809. CHALLENGE AND APPEALS**

1. Any person, partnership, corporation or organization aggrieved by any administration action of a qualified representative of the TOWNSHIP, may appeal to the COMMISSIONERS within thirty (30) days of that action. Any such appeal shall be governed by the procedures of Article V of the Local Agency Law, 2 Pa. C.S.A. 401 et seq.
2. Any person, partnership, corporation or organization aggrieved by any decision of the COMMISSIONERS, may appeal to Lancaster County Court of Common Pleas, in accordance with Article VII of Local Agency Law, 2 Pa. C.S.A. 701 et seq. the Local Agency Law, within thirty (30) days of that decision.

#### **SECTION 810. REPEALER**

1. Except as otherwise required by law, this ORDINANCE is intended as a continuation of, and not a repeal of, existing regulations governing the subject matter. To the extent that this ORDINANCE restates regulations contained in ordinances previously enacted by the COMMISSIONERS, this ORDINANCE shall be considered a restatement and not a repeal of such regulations. It is the specific intent of the COMMISSIONERS that all provisions of this ORDINANCE shall be considered in full force and effect as of the date such regulations were initially enacted. All ordinances or parts of ordinances inconsistent with the provisions of this ORDINANCE are hereby repealed. It is expressly provided that the provisions of this ORDINANCE shall not affect any act done, contract executed or liability incurred prior to its effective date, or affect any suit or prosecution pending or to be instituted to enforce any rights, rule, regulation or ordinance, or part thereof, or to punish any violation which occurred under any prior STORMWATER regulation or ordinance. In the event any violation has occurred under any prior STORMWATER regulation or ordinance or code of the TOWNSHIP, prosecution may be initiated against the alleged offender pursuant to the provisions of said prior STORMWATER regulation or ordinance or code, and the provisions and penalties provided in said prior STORMWATER regulation or ordinance or code shall remain effective as to said violation.

2. Any Plan (hereinafter defined) pending at the time of the effective date of this ORDINANCE shall be allowed to proceed with revisions, finalization and implementation in accordance with any ordinance or code in effect prior hereto.

**SECTION 811 . VALIDITY**

Should any section, subsection, provision, sentence or part of this ORDINANCE be declared by a court of competent jurisdiction to be invalid, such decision shall not affect the validity of this ORDINANCE as a whole or any remaining section, subsection, provision, sentence or part thereof.

**SECTION 812 . EFFECTIVE DATE**

This ORDINANCE shall become effective immediately following its adoption by the COMMISSIONERS of Manheim Township, Lancaster County, Pennsylvania.

Duly Ordained this \_\_\_\_\_ day of \_\_\_\_\_, 2018.

ATTEST:

MANHEIM TOWNSHIP COMMISSIONERS

\_\_\_\_\_

\_\_\_\_\_

Sean P. Molchany, Secretary

President (Vice-President)