

**STORMWATER
MANAGEMENT
ORDINANCE**

**FRANKLIN
TOWNSHIP**

May, 2013

**YORK COUNTY
PENNSYLVANIA**

FRANKLIN TOWNSHIP

STORMWATER MANAGEMENT ORDINANCE

ORDINANCE NO. _____

FRANKLIN TOWNSHIP, YORK COUNTY, PENNSYLVANIA

Adopted

_____, **2013**

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**FRANKLIN TOWNSHIP
YORK COUNTY, PENNSYLVANIA**

ORDINANCE NO. _____

**AN ORDINANCE OF FRANKLIN TOWNSHIP, YORK COUNTY, PENNSYLVANIA
PROVIDING FOR THE MANAGEMENT OF STORMWATER**

BE IT ENACTED AND ORDAINED by the Board of Supervisors in and for the Township of Franklin, York County, Pennsylvania, and it is hereby enacted and ordained by the authority of the same as follows:

ARTICLE I - GENERAL PROVISIONS

Section 101. Short Title

This Ordinance shall be known and may be cited as the "Franklin Township Stormwater Management Ordinance."

Section 102. Statement of Findings

The governing body of Franklin Township finds that:

- A. Inadequate management of accelerated runoff of stormwater resulting from development throughout a watershed increases flows and velocities, contributes to erosion and sedimentation, overtaxes the carrying capacity of streams and storm sewers, greatly increases the cost of public facilities to carry and control stormwater, undermines flood plain management and flood control efforts in downstream communities, reduces groundwater recharge, threatens public health and safety, and increases non-point source pollution of water resources.
- B. A comprehensive program of stormwater management, including reasonable regulation of development and activities causing accelerated runoff, is fundamental to the public health, safety, and welfare and the protection of people of the Commonwealth, their resources, and the environment.
- C. 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.
- D. Federal and state regulations require certain municipalities to implement a program of stormwater controls. These municipalities are required to obtain a permit for stormwater discharges from their separate storm sewer systems under the National Pollutant Discharge Elimination System (NPDES).

Section 103. Purpose

The purpose of this Ordinance is to promote health, safety, and welfare within the Municipality and its watershed(s) by minimizing the harm and maximizing the benefits described in Section 102 of this Ordinance, through provisions designed to:

- A. Meet legal water quality requirements under state law, including regulations at 25 Pa. Code 93, et seq. to protect, maintain, reclaim, and restore the existing and designated uses of the waters of this Commonwealth.
- B. Preserve the natural drainage systems as much as possible.
- C. Manage stormwater runoff close to the source.
- D. Provide procedures and performance standards for stormwater planning and management.
- E. Maintain groundwater recharge to prevent degradation of surface and groundwater quality and to otherwise protect water resources.
- F. Prevent scour and erosion of stream banks and stream beds.
- G. Provide proper operation and maintenance of all SWM BMPs that are implemented within the municipality.
- H. Provide standards to meet NPDES permit requirements.

Section 104. Statutory Authority

A. Primary Authority:

Franklin Township is empowered to regulate land use activities that affect stormwater impacts by the authority of Section 2704 of the Second Class Township Code, 53 P.S.67704, and the Act of October 4, 1978, P.L. 864 (Act 167), 32 P.S. Section 680.1, et seq., as amended, the "Stormwater Management Act."

B. Secondary Authority:

The Municipality 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, 53 P.S. §10101, et seq. The Pennsylvania Municipalities Planning Code, as amended.

Section 105. Applicability

- A. All regulated activities and all activities that may affect stormwater runoff, including land development and earth disturbance activity, are subject to regulation by this Ordinance.
- B. Any submission that does not require a stormwater management plan at the time of subdivision or land development will still be required to address stormwater management at the time the individual lots are developed or construction commences, unless said subdivision proposes infrastructure features, such as new streets, for which stormwater management controls are ordinarily required.
- C. Development of the individual lots is subject to stormwater management as defined within the ordinance.

Section 106. Repealer

Any other ordinance provision or regulation of the Municipality inconsistent with any of the provisions of this Ordinance is hereby repealed to give this Ordinance full force and effect to the extent of the inconsistency only.

Section 107. Severability

In the event that a court of competent jurisdiction declares any section, clause or provision of this Ordinance invalid, such decision shall not affect the validity of any of the remaining sections, clauses or provisions of this Ordinance.

Section 108. Compatibility with Other Requirements

Approvals issued and actions taken under this Ordinance do not relieve the applicant of the responsibility to secure required permits or approvals for activities regulated by any other code, law, regulation, or ordinance. In the event of a conflict between this ordinance and any other ordinance, the more restrictive ordinance shall apply.

Section 109. Interpretation

Unless otherwise expressly stated, the succeeding shall, for the purposes of this Ordinance, be interpreted in the following manner:

- A. Words used in the present tense also imply the future tense.
- B. Words used in the singular imply the plural, and vice versa.
- C. Words of masculine gender include feminine gender, and vice versa.
- D. The words and abbreviation "includes," "including," "shall include," "such as", and "e.g." are not limited to the specific example(s) given but are intended to extend the words' or words' meaning(s) to all other instances of like kind and character.
- E. The words "person", "applicant", or "developer" include, a partnership, corporation, or other legal entity, as well as an individual.
- F. The words "shall", "required", or "must" are mandatory; the words "may" and "should" are permissive.

Section 110. 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 111. Duty of Persons Engaged in the Development of Land

Notwithstanding any provision(s) of this Ordinance, including exemptions, 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 prevent injury to

health, safety, or other property. Such measures shall include actions as are required to manage the rate, volume, direction, and quality of resulting stormwater runoff in a manner which adequately protects health, property and water quality.

Section 112. Municipal Liability Disclaimer

- A. Neither the granting of any approval under this Ordinance, nor the compliance with the provisions of this Ordinance, or with any condition imposed by a municipal official hereunder, shall relieve any person from any responsibility or damage to persons or property resulting therefrom, or as otherwise imposed by law nor impose any liability upon the Municipality for damages to persons or property.
- B. The granting of a permit which includes any stormwater management facilities shall not constitute a representation, guarantee, or warranty of any kind by the Municipality, or by an official or employee thereof, of the practicability or safety of any structure, use or other plan proposed, and shall create no liability upon or cause of action against such public body, official or employee for any damage that may result pursuant thereto.

ARTICLE II - DEFINITIONS

Act 167 - Act of October 4, 1978, P.L.864, (Act 167), as amended, and known as the "Stormwater Management Act".

Agricultural Activity - Activities associated with agriculture such as, but not limited to, agricultural cultivation, agricultural operations, 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 measures. Construction of new buildings or impervious area is not considered an agricultural activity.

Applicant - A landowner, developer, or other person who has filed an application to the municipality for approval to engage in any regulated activity at a project site in the Municipality.

ASTM - American Society for Testing and Materials

Best Management Practice (BMP) - Activities, facilities, designs, measures, or procedures used to manage stormwater impacts from regulated activities, to meet state water quality requirements, to promote groundwater recharge, and to otherwise meet the purposes of this Ordinance. Stormwater BMPs are commonly grouped into one of two broad categories or measures: "structural" or "nonstructural." In this Ordinance, nonstructural BMPs or measures refer to operational and/or behavior-related practices that attempt to minimize the contact of pollutants with stormwater runoff whereas structural BMPs or measures are those that consist of a physical device or practice that is installed to capture and treat stormwater runoff. Structural BMPs include, but are not limited to, a wide variety of practices and devices, from large-scale retention ponds and constructed wetlands, to small-scale underground treatment systems, infiltration facilities, filter strips, low impact design, bioretention, wet ponds, permeable paving, grassed swales, riparian or forested buffers, sand filters, detention basins, and manufactured devices. Structural stormwater BMPs are permanent appurtenances to the project site.

BMP Manual - Pennsylvania Stormwater Best Management Practices Manual, as amended and updated.

Channel- A natural or artificial watercourse with a definite end and banks, which confine and conduct continuously or periodically flowing water.

Clean Streams Law – Act 394 of 1937, PL 1987, as amended and updated, 35 P.S. §691.1, et seq.

Conservation District - The York County Conservation District, which District is as defined in Section 3(c) of the Conservation District Law (3 P. S. § 851(c)) that has the authority under a delegation agreement executed with DEP to administer and enforce all or a portion of the regulations promulgated under 25 Pa. Code 102.

County - York County Pennsylvania

Culvert - A structure which carries surface water through an obstruction.

Dam - An impoundment structure regulated by 25 Pa. Code Chp. 105.

DEP - The Pennsylvania Department of Environmental Protection.

Design Storm - The magnitude and temporal distribution of precipitation from a storm event measured in probability of occurrence, e.g., a 5-year storm, and duration, e.g., 24 hours, used in the design and evaluation of stormwater management systems. Also see Return Period.

Developer - Any person, partnership, association, corporation or other entity, or any responsible person therein or agent thereof, that undertakes any Regulated Activity.

Detention Basin - A structure designed to retard stormwater runoff by temporarily storing and releasing the runoff at a predetermined rate.

Detention Volume - The volume of runoff that is captured and released into the waters of this Commonwealth at a controlled rate.

Development Site (Site) - See Project Site.

Disconnected Impervious Area (DIA) - An impervious or impermeable surface that is disconnected from any stormwater drainage or conveyance system and is redirected or directed to a pervious area, which allows for infiltration, filtration, and increased time of concentration as specified in Appendix B. Disconnected Impervious Area of this Ordinance.

Disturbed Area - An unstabilized land area where an earth disturbance activity is occurring or has occurred.

Earth Disturbance Activity - A construction or other human activity which disturbs the surface of the land, including, but not limited to: clearing and grubbing; grading; excavations; embankments; road maintenance; building construction; and the moving, depositing, stockpiling, or storing of soil, rock, or earth materials.

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

E & S Manual – DEP's Erosion and Sediment Pollution Control Manual, 2, No. 363-2134-008 (April 15, 2000) as amended and updated.

Erosion and Sediment Control Plan - A site specific plan consisting of both drawings and a narrative that identifies BMPs to minimize accelerated erosion and sedimentation before, during and after earth disturbance activity.

Existing Condition - The dominant land cover during the 5-year period immediately preceding a proposed regulated activity.

FEMA - Federal Emergency Management Agency.

Floodplain - Any land area susceptible to inundation by water from any natural source as delineated by applicable FEMA maps and studies as being a special flood hazard area.

Floodway - The channel of the watercourse and those portions of the adjoining floodplains that are reasonably required to carry and discharge the 100-year flood. Unless otherwise specified, the boundary of the floodway is as indicated on maps and flood insurance studies provided by FEMA. In an area where no FEMA maps or studies have defined the boundary of the 100-year floodway, it is assumed, absent evidence to the contrary, that the floodway extends from the stream to 50 feet from the top of the bank of the stream.

Forest Management/Timber Operations - Planning and activities necessary for the management of forest land. These include conducting a timber inventory, preparation of forest management plans, silvicultural treatment, cutting budgets, logging road design and construction, timber harvesting, site preparation, and reforestation.

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 development 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 to D (NRCS 3,4).

IWRP - The York County Integrated Water Resources Plan, which Plan includes Act 167 Plan elements and requirements.

Impervious Surface (Impervious Area) - A surface that prevents the infiltration of water into the ground. Impervious surfaces and areas shall include, but not be limited to, roofs, additional indoor living spaces, patios/decks, garages, storage sheds and similar structures, and any new streets and sidewalks. However, any surface or area designed, constructed and maintained to permit infiltration as specified herein shall be considered pervious, not impervious. For the purposes of this Ordinance, a surface or area shall not be considered impervious if such surface or area does not diminish the capacity for infiltration of stormwater for storms up to, and including, a two (2)-year 24-hour storm event.

Infiltration - The entrance of surface water into the soil, usually at the soil-air interface.

Karst - A type of topography or landscape characterized by surface depressions, sinkholes, rock pinnacles/uneven bedrock surface, underground drainage, and caves. Karst landscapes are formed on carbonate rocks, such as limestone or dolomite.

Land Development – As defined by the Pennsylvania Municipalities Planning Code, 53 P.S. §10101, et seq..

Limit of Disturbance – A line provided on the E&S Plan or SWM Plan that indicates the total area to be disturbed over the life of the project.

Municipality – Franklin Township, York County, Pennsylvania.

NPDES - National Pollution Discharge Elimination System

NRCS - USDA Natural Resources Conservation Service (previously SCS).

O & M - Operation and Maintenance

O & M Plan - Operation and Maintenance Plan

PCSWMP - Post-Construction Stormwater Management Plan

Peak Discharge - The maximum rate of stormwater runoff from a specific storm event.

PennDOT – Pennsylvania Department of Transportation

Percolation - The downward movement, under the influence of gravity, of water under hydrostatic pressure through interstices of the soil or rock.

Pervious Area - Any area not defined as impervious.

Professional Engineer – An engineer registered or licensed in the Commonwealth of Pennsylvania

PTC – Pennsylvania Turnpike Commission

Project Site - The specific area of land where any regulated activities in the Municipality are planned, conducted, or maintained.

Qualified Person - Any person licensed by the State of Pennsylvania or otherwise qualified by law to perform the work required by this Ordinance.

Regulated Activities - Any earth disturbance activities or any activities that involve the alteration or development of land in a manner that may affect stormwater runoff.

Regulated Earth Disturbance Activity - Activity involving earth disturbance subject to regulation under 25 Pa. Code 93, 25 Pa. Code Chp. 102, or the Clean Streams Law.

Retention Basin - An impoundment in which stormwater is stored and not released during a storm event. Stored water may be released from the basin at some time after the end of a storm.

Retention Volume/Removed Runoff - The volume of runoff that is captured and not released directly into the surface waters of this Commonwealth during or after a storm event.

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 25-year return period rainfall would be expected to occur on average once every 25 years; or stated in another way, the probability of a 25-year storm occurring in any one year is 0.04, i.e., a 4% chance.

Riparian Buffer - A Best Management Practice that is an area of permanent vegetation along surface waters. (Such areas serve as natural vegetative filters between upland landscapes and waterways.)

Runoff - Any part of precipitation that flows over the land.

Sediment - Soils or other materials transported by surface water as a product of erosion.

Sheet Flow - Water flow with a relatively thin and uniform depth.

Site – See Project Site

Spillway - A depression in the embankment of a pond or basin which is used to pass peak discharge greater than the maximum design storm controlled by the pond or basin.

State Water Quality Requirements - The regulatory requirements to protect, maintain, reclaim, and restore water quality under Title 25 of the Pennsylvania Code and the Clean Streams Law.

Storm Frequency - The number of times that a given storm event occurs on average in a stated period of years.

Storm Sewer - A pipe or conduit, or a system of pipes or conduits, which intercepts and carries surface stormwater runoff, but excludes sewage, industrial wastes and similar discharges.

Stormwater - Drainage runoff from the surface of the land resulting from precipitation or snow or ice melt.

Stormwater Management Facility - Any structure, natural or man-made, that, due to its condition, design, or construction, conveys, stores, or otherwise affects stormwater runoff. Typical stormwater management facilities include, but are not limited to, detention and retention basins, open channels; storm sewers, pipes, and infiltration facilities.

Stormwater Management Plan - Parts and/or elements of the York County Integrated Water Resources Plan which incorporate the requirements of the Act of October 4, 1978, P.L. 864, (Act 167), as amended, and known as the "Storm Water Management Act."

Stormwater Management Best Management Practices -"SWM" or "BMP" See "Best Management Practice".

Stormwater Management Site Plan - The plan prepared by the developer or his representative indicating how stormwater runoff will be managed at the development site in accordance with this Ordinance. Stormwater Management Site Plan will be designated as SWM Site Plan throughout this Ordinance. For all NPDES permitted sites, the Stormwater Management Site Plan shall include, and be consistent with, the Erosion and Sediment Control Plan as submitted to the YCCD and/or DEP.

Subdivision - The division or re-division of a lot, tract or parcel of land by any means into two or more lots, tracts or parcels or other divisions of land including changes in existing lot lines for the purpose, whether immediate or future, of lease, partition by the court for distribution to heirs or devisees, transfer of ownership or building or lot development; provided, however, that the subdivision by lease of land for agricultural purposes into parcels of more than ten acres, not involving any new street or easement of access or any residential dwelling, shall be exempted.

SWM - Stormwater Management.

Township Engineer - That professional or firm licensed in the Commonwealth of Pennsylvania as a professional engineer, who is duly appointed by the Municipality to perform engineering services on behalf of the Municipality.

USDA - United States Department of Agriculture.

Waters of this Commonwealth – Any and all rivers, streams, creeks, rivulets, impoundments, 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 this Commonwealth.

Watershed - Region or area drained by a river, watercourse, or other surface water of this Commonwealth.

Wetland - 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, and similar areas.

YCCD - York County Conservation District

ARTICLE III - STORMWATER MANAGEMENT STANDARDS

Section 301. General Requirements

- A. For all Regulated Activities, unless preparation of a SWM Site Plan is specifically exempted in Section 302:
 - 1. Preparation and implementation of an approved SWM Site Plan is required.
 - 2. No Regulated Activities shall commence until the Municipality issues written approval of a SWM Site Plan which demonstrates compliance with the requirements of this Ordinance.
- B. SWM Site Plans approved by the Municipality, in accordance with Section 406, shall be on site throughout the duration of the Regulated Activity.
- C. The Municipality may, after consultation with DEP, approve measures for meeting the State Water Quality Requirements other than those in this Ordinance, provided that they meet the minimum requirements of, and do not conflict with, State or Federal law including, but not limited to, the Clean Streams Law. The Municipality shall maintain a record of consultations with DEP pursuant to this paragraph.
- D. For all Regulated Earth Disturbance Activities, Erosion and Sediment control BMPs shall be designed, implemented, operated, and maintained during the Regulated Earth Disturbance Activities, i.e., during construction, 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 E&S Manual.
- E. For all Regulated Activities, implementation of the volume controls in Section 303 is required, unless specifically exempted under Section 302, or exempted by an approved modification request as specified in Section 403.B of this Ordinance.
- F. Impervious Areas:
 - 1. The measurement of Impervious Areas shall include all of the impervious areas in the total proposed development even if development is to take place in phases.
 - 2. For development taking place in phases, the entire development plan must be used in determining conformance with this Ordinance.
 - 3. For projects that add Impervious Area to a parcel, the total impervious area on the parcel is subject to the requirements of this Ordinance; except that the volume controls in Section 303 and the peak rate controls of Section 304 do not need to be retrofitted (applied) to existing impervious areas that are not being altered by the proposed regulated activity.
- G. Stormwater flows onto adjacent property shall not be created, increased, decreased, relocated, or otherwise altered without written consent of the adjacent property owner(s). Such stormwater flows shall be subject to the requirements of this Ordinance.
- H. All Regulated Activities shall include such measures as necessary to:
 - 1. Protect health, safety, and property;

2. Meet the water quality goals of this Ordinance, as stated in Section 103, "Purpose", by implementing measures to:
 - a. Minimize disturbance to floodplains, wetlands, wooded areas, and existing vegetation.
 - b. Maintain or extend riparian buffers.
 - c. Avoid erosive flow conditions in natural flow pathways.
 - d. Minimize thermal impacts to waters of this Commonwealth.
 - e. Disconnect impervious surfaces by directing runoff to pervious areas, wherever possible.
 - f. Minimize soil disturbance and compaction. Topsoil, if removed, shall be replaced to a minimum depth equal to its depth prior to removal or four (4) inches, whichever is greater. (Additional topsoil may be needed for vegetation other than sod.)
3. To the maximum extent practicable, incorporate the techniques for Low Impact Development Practices described in the BMP Manual.
 - I. The design of all facilities in areas of carbonate geology or karst topography shall include an evaluation of measures to minimize adverse effects, including hydro-geologic studies if required by the Municipality.
 - J. Infiltration BMPs shall be spread out, made as shallow as practicable, and located to maximize use of natural on-site infiltration features while still meeting the other requirements of this Ordinance. In addition, infiltration BMPs shall include pre-treatment BMPs where appropriate.
 - K. Normally dry, open-top storage facilities, designed as such, shall completely drain both the volume control and rate control capacities over a period of time not less than 24 hours and not more than 72 hours from the end of the design storm. However, any designed infiltration at such facilities is exempt from the minimum 24-hour standard, i.e., may infiltrate in a shorter period of time, so long as none of the stormwater flowing into the infiltration facility is discharged directly into the surface waters of the Commonwealth. (Inordinately rapid infiltration rates may indicate the presence of large fractures or other conditions for which an additional soil buffer may be required.)
 - L. The design storm volumes and precipitation intensities to be used in the analysis of discharge or runoff shall be obtained from the Precipitation-Frequency Atlas of the United States, Atlas 14, Volume 2, Version 3.0, U.S. Department of Commerce, National Oceanic and Atmospheric Administration (NOAA), National Weather Service, Hydrometeorological Design Studies Center, Silver Spring, Maryland. NOAA's Atlas 14 can be accessed at: <http://hdsc.nws.noaa.gov/hdsc/pfds/>.
 - M. For all regulated activities, SWM 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, the Clean Streams Law, and Act 167.

N. Various BMPs and their design standards are listed in the BMP Manual.

Section 302. Exemptions

A. Any Regulated Activity that meets the following exemption criteria is exempt from the part(s) of this Ordinance as specified herein. However, the requirements of the Ordinance shall otherwise remain in effect. The criteria for exemption in this Section apply to the total development proposed, including instances in which the development is proposed to take place in phases. The date of enactment of this Ordinance shall be the starting point from which future development and the respective proposed impervious surface computations shall be cumulatively considered and regulated. Exemption shall not relieve an applicant from implementing such measures as necessary to meet the intent of this Ordinance, or compliance with any NPDES Permit requirements. Activities that involve the diversion or piping of any natural or manmade watercourse including the relocation of such facility or watercourse are not exempt from submission of a Stormwater Management Site Plan.

1. Regulated Activities that create impervious areas equal to or less than 1,000 square feet may be exempt from the peak rate control, volume control and the SWM Site Plan preparation requirements of this Ordinance. In order to be exempt, runoff from proposed impervious areas may not be directly connected to an existing impervious area such as a parking lot, street, etc. and may not create an adverse impact on adjoining properties. An application and sketch plan shall be provided for review by the Township and for determining exemption.
2. Regulated Activities that create Disconnected Impervious Areas(DIAs) greater than 1,000 square feet and equal to or less than 5,000 square feet are exempt only from the peak rate control requirement of this Ordinance. DIAs shall be demonstrated per direction found in Appendix B. An application and stormwater management site plan shall be provided for review by the Township.
3. Agricultural activity is exempt from rate and volume control and SWM Site Plan preparation requirements of this Ordinance provided the activities are performed according to the requirements of 25 Pa. Code 102.
4. Forest management and timber operations are exempt from rate and volume control and SWM Site Plan preparation requirements of this Ordinance provided the activities are performed according to the requirements of 25 PA Code 102.
5. Domestic (non-commercial) gardening and landscaping are exempt from approval and permitting under this Ordinance.
6. Exemptions from certain provisions of this Ordinance shall not relieve the applicant from the requirements in Sections 301.D. through L. of this Ordinance.
7. The Municipality may deny or revoke any exemption pursuant to this Section at any time for any project that the Municipality determines poses a threat to public health, safety, property or the environment.

B. Authorization of Exemptions:

1. Exemption request approval shall be at the discretion of Franklin Township, and shall be subject to the following:

- a. Franklin Township may deny any exemption request or suspend or revoke any approved exemption request at any time for any project where Franklin Township believes that the proposed Regulated Activity poses a threat to public health, safety, property, or the environment.
- b. Approval of an exemption request does not relieve the property owner or developer from other applicable requirements of this Ordinance or of other Franklin Township ordinance or regulations.
- c. Franklin Township reserves the right to deny an exemption request if a preexisting drainage problem is known or has been identified or if a drainage problem is expected to exist downstream from the proposed Regulated Activity.

Section 303. Volume Controls

The low impact development practices provided in the BMP Manual shall be utilized for all Regulated Activities to the maximum extent practicable. Water volume controls shall be implemented using the Design Storm Method in Subsection A or the Simplified Method in Subsection B below. For Regulated Activity areas equal or less than one (1) acre that do not require hydrologic routing to design the stormwater facilities, this Ordinance establishes no preference for either methodology; therefore, the applicant may select either methodology on the basis of economic considerations, the intrinsic limitations on applicability of the analytical procedures associated with each methodology, and other factors.

A. The Design Storm Method (CG-1 in the BMP Manual) is applicable to any size of Regulated Activity. This method requires detailed modeling based on site conditions.

- 1. The Regulated Activity shall not increase the post-development total runoff volume from the pre-development total runoff volume for all storms equal to or less than the two (2)-year 24-hour duration precipitation.
- 2. For modeling purposes:
 - a. Existing (pre-development) non-forested pervious areas must be considered meadow.
 - b. Twenty percent (20%) of the existing impervious area of a project site, when present, shall be considered meadow in the model for existing conditions. The Municipality may require the percentage to be increased if there is a history of or a documented pre-existing drainage problem associated with the property.

B. The Simplified Method (CG-2 in the BMP Manual) provided below is independent of site conditions and should be used if the Design Storm Method is not followed. This method is not applicable to Regulated Activities (disturbed areas) greater than one (1) acre or for projects that require design of stormwater storage facilities.

For new impervious surfaces:

- 1. Stormwater facilities shall capture at least the first two (2) inches of runoff from all new impervious surfaces.

2. At least the first one (1) inch of runoff from new impervious surfaces shall be permanently removed from the runoff flow, i.e., it shall not be released into the surface waters of this Commonwealth. Removal options for the first one (1) inch of runoff include reuse, evaporation, transpiration, and infiltration.
 3. Wherever possible, infiltration facilities should be designed to accommodate infiltration of the entire permanently removed runoff; however, in all cases at least the first 0.5 inch of the permanently removed stormwater runoff shall be infiltrated.
 4. This method is exempt from the requirements of Section 304 Rate Controls.
- C. Infiltration Alternative: Where infiltration is not possible due to soil characteristics or is not desirable given other characteristics, water quality control may be proposed as an alternative to strict adherence to the volume control standards of Section 304 of this Ordinance. Where water quality control is proposed, the following standards shall be achieved.
1. At a minimum, the following documentation shall be provided to justify the proposal to reduce the infiltration requirements:
 - a. Description of and justification for field infiltration/ permeability testing with respect to the type of test and test locations.
 - b. An interpretive narrative describing existing soils of the site and their structure as these relate to the interaction between soils and water characteristics of the site. In addition to providing soil and soil profile descriptions, this narrative shall identify depth to seasonal water tables and depth to bedrock and provide a description of all subsurface elements (restrictive layers, geology, etc.) that influence the direction and rate of subsurface water movement.
 - c. A qualitative assessment of the site's contribution to annual aquifer recharge shall be made, along with the identification of any restrictions or limitations associated with the use of designed infiltration facilities.
 - d. The provided documentation must be signed and sealed by a professional engineer or geologist.
 2. Water Quality BMPs shall be implemented on all permanent stormwater discharges from the proposed project site to achieve pollutant removal efficiencies in accordance with the Table 303.1.

Table 303.1 Required Pollutant Removal Efficiencies for Infiltration Alternatives

Pollutant Load	Units	Required Removal Efficiency (%)
Total Suspended Solids (TSS)	Pounds	85%
Total Phosphorus (TP)	Pounds	85%
Total Nitrate (NO ₃)	Pounds	50%

3. Design guidance from the most current version of the BMP Manual, or equivalent resource as pre-coordinated with Franklin Township, shall be consulted when choosing design criteria for water quality BMPs.

Section 304. Rate Controls

- A. For computation of pre-development peak discharge rates, twenty percent (20%) of the existing impervious area of a project site, when present, shall be considered meadow.
- B. Post-development discharge rates shall not exceed the pre-development discharge rates for the 1-, 2-, 5-, 10-, 25-, 50-, and 100-year 24-hour storms. If it is shown that the peak rates of discharge indicated by the post-development analysis are less than or equal to the peak rates of discharge indicated by the pre-development analysis for 1-, 2-, 5-, 10-, 25-, 50-, and 100-year, 24-hour storms, then the requirements of this section have been met. Otherwise, the applicant shall provide additional controls as necessary to satisfy the peak rate of discharge requirement .

Section 305. Stormwater Management Facilities for Pennsylvania Department of Transportation and Pennsylvania Turnpike Commission Roadways and Associated Facilities

For the purposes of the Stormwater Management Plan elements, contained within the IWRP, and this Ordinance, design policy pertaining to stormwater management facilities for PennDOT and PTC roadways and associated facilities is provided in Section 13.7 (Antidegradation and Post Construction Stormwater Management Policy) of PennDOT Publication No. 13M, Design Manual Part 2 (August 2009), as developed, updated, and amended in consultation with the DEP. As stated in DM-2.13.7.D (Act 167 and Municipal Ordinances), PennDOT and PTC roadways and associated facilities shall be consistent with Act 167 Plans. Dm-2.13.7.B (Policy on Antidegradation and Post Construction Stormwater Management) was developed as a cooperative effort between PennDOT and DEP. DM-2.13.7.C (Project Categories) discusses the anticipated impact on the quality, volume, and rate of stormwater runoff.

Where standards in the Act 167 elements of the IWRP and this Ordinance are impractical, PennDOT or the PTC may request assistance from DEP, in consultation with the County, to develop an alternative strategy for meeting State water quality requirements and the goals and objectives of the Act 167 elements within the IWRP.

For the purposes of the Act 167 elements in the IWRP and this Ordinance, road maintenance activities are regulated under 25 Pa. Code Chapter 102.

Section 306 - STORM DRAINAGE SYSTEMS AND STORMWATER MANAGEMENT

Design and construction of storm drainage and stormwater management facilities shall be in accordance with this Ordinance, adopted pursuant to the (IWRP Plan) Act 167, Franklin Township Specifications, and PennDOT Publication 408 and Roadway Construction Standards and shall be subject to the review and inspection of Franklin Township and the Township Engineer.

In addition SWM Site Plans and reports shall meet the following requirements:

306.1 – General Requirements

- A. Storm sewers, culverts, bridges, and related drainage installations shall be provided:
 - 1. To permit unimpeded flow of natural watercourses.

2. To insure adequate drainage of all low points as may be related to streets.
 3. To intercept stormwater runoff along streets at intervals reasonably related to the extent and grade of the area drained to prevent flow of stormwater across intersections, and to prevent the flooding of intersections during the design storm.
 4. To insure adequate and unimpeded flow of stormwater under driveways in, near, or across natural watercourses or drainage swales. Properly sized pipes or other conduits shall be provided as necessary.
 5. To prevent excessive flow on or across streets, sidewalks, drives, parking areas, and any other paved surface or access way.
 6. To lead stormwater away from springs.
 7. To provide adequate drainage away from on-site sewage disposal systems.
- B. The SWM Site Plan for each subdivision and/or land development shall take into account and provide for upstream areas within the entire watershed in computing discharge quantities, sizing of pipes, inlets and other structures. The runoff from any proposed development shall be subject to evaluation which includes the anticipated runoff from other existing or proposed developments within the same watershed. Stormwater management facilities designed to serve more than one property or development, in the same watershed are encouraged, in which case consultation with the Municipality is required prior to design.
- C. All natural streams, channels, swales, drainage systems and/or areas of concentration of surfaces water shall be maintained in their existing condition unless alteration is approved by the Municipality. In any event, all encroachment activities shall comply with 25 Pa. Code Chp. 105.
- D. Man-made structures shall be kept to a minimum and bridges, culverts; or rip-rap shall be constructed to maintain the natural characteristics of the stream and shall meet the approval of the Municipality.
- E. For the purpose of this subsection, streams and intermittent streams are defined as those watercourses on the Franklin Township Zoning Map, the USGS Quadrangle maps of the area, and/or determined as such pursuant to an onsite survey by the Municipality.
- F. Retention/detention basins shall be designed to utilize the natural contours of the land. When such design is impracticable, the construction of the basin shall utilize slopes as shallow as possible to blend the structures into the existing terrain.
- G. Any subdivision and/or land development within a Flood Hazard area shall comply with all of the provisions of the Franklin Township Zoning Ordinance [Ord.2006-1, as amended and updated, and the rules and regulations of DEP[25 Pa. Code Chp. 271]
- H. Any water originating, from non-natural sources such as swimming pools, air conditioning units, sump pumps, roof drain or other similar flow shall not be discharged directly onto any street or other public right-of-way used for pedestrian or vehicular access. The Municipality may require a plan that provides for these discharges.

- I. All lots, tracts, or parcels shall be graded to provide proper drainage away from buildings and dispose of the runoff without ponding, and all land within a development shall be graded to drain and dispose of surface water without ponding, except where other arrangements are approved by the Municipality. Grading shall not be done in such a way so as to divert water onto the property of another landowner without the expressed consent of the Municipality and the affected landowner.

306.2 - Stormwater Management Site Plan Requirements

In addition to the Drainage Plan Requirements in Article IV the following requirements apply:

- A. A plan showing all pre-development and post-development stormwater flow to and from basins. A plan showing all post-development flows to all inlets, headwalls, swales, channels, and the like. The drainage areas and the design flow to each inlet or structure shall be delineated on a copy of the SWM Site Plan where applicable.
- B. A map depicting the total watershed. A USGS Quadrangle Map is suitable as the source for such a map. However, the watershed area must be highlighted or otherwise distinguished from other areas outside the watershed.
- C. Maps and drawings showing all existing and proposed drainage facilities affecting the subject property.
- D. The following stormwater related items shall be included as part of the plan submission:
 1. Definition of existing on or off-site drainage problems.
 2. Appropriate stormwater management criteria such as release rate percentage, direct discharge and downstream impact elevation.
 3. Configuration of the storm sewer and sanitary sewer system layouts.
 4. Location and layout of the stormwater management system with a detailed description of its proposed design and operation.
 5. Profiles of all proposed storm sewers, including elevation, sizes, slopes and materials, at a scale of no less than one (1) inch equal fifty (50) feet horizontal and one (1) inch equal five (5) feet vertical. In addition, a plan (at a smaller scale where necessary) shall be provided which shows the overlay development drainage and grading.
 6. Locations, dimensions and design details required for the construction of all facilities. All existing and proposed detention/retention basins shall, at a minimum, be shown in plain view and shall include but not be limited to the following information:
 - a. Emergency spillway crest elevations and widths
 - b. Embankment crest elevations and widths
 - c. Outfall structure types, sizes, lengths and elevations
 - d. Outfall orifice elevations and dimensions

- e. Bottom of basin elevation
- 7. Soil percolation test results. Soil testing shall be completed and reported in accordance with the criteria established by the Township Engineer. Specific alternate criteria may be submitted for review and consideration.
- 8. Final provisions for ownership and ongoing maintenance of all stormwater related facilities.

306.3 - Standards and Criteria

A. Stormwater Collection System.

The design of stormwater collection and conveyance facilities shall be governed by the following criteria:

- 1. Peak discharge shall be computed using the Rational Formula:

$$Q = C I A$$

Where:

Q = Peak discharge in cubic feet per second

C = Runoff coefficient expressed as the ratio of peak runoff rate to the average amount of rainfall over a period of time equal to the time of concentration

I = Average rainfall intensity in inches per hour for a time equal to the time of concentration

A = Drainage area in acres

In general, the procedure from the Pennsylvania Department of Transportation, Design Manual, Part 2 shall be followed.

- 2. Runoff coefficients shall be computed as a weighted average of conditions which represent maximum development potential on the property. Soil types, ground slope, and storm frequency shall all be considered in the selection of Runoff Coefficients. Reference for the coefficients applied should be provided in the report.
- 3. Storm intensity (I) shall be computed as a function of the time of concentration (Tc). A Tc of five (5) minutes shall be used in determining intensity unless the drainage area parameters justify the use of a greater value. Use of a Tc greater than 5 minutes shall be as approved by the Township Engineer.
- 4. The minimum full flow velocity of any storm sewer or culvert shall be 2.5 feet per second (fps).
- 5. Storm Frequency

The following storm frequencies are to be used for design:

- a. Local Streets - 25 year

- b. Major Intersections of Local Streets - 25 year
- c. Collector Streets and Arterial Streets - 50 year

All structures shall be designed to convey the 100-year storm flood without roadway overtopping. The Municipality may also require easements to convey the 100-year frequency storm through the entire project site.

Alternate criteria may be required following recommendation of the Municipality Engineer. In addition, functional classification of streets, for the purpose of determining storm frequencies, shall be as interpreted by the Township Engineer.

- 6. For storm sewers that will be dedicated to the Municipality, all pipe material shall either be reinforced concrete or smooth lined corrugated polyethylene pipe to be as determined by the Municipality. Standards as referenced from ASTM or other source acceptable to the Township Engineer shall be specified.
- 7. Minimum pipe size for storm sewers shall be fifteen (15) inches in diameter unless otherwise approved by the Township Engineer.
- 8. Installation:
 - a. Storm sewers shall be installed a sufficient time in advance of final street paving in order to allow for settlement of the trench.
 - b. Installation shall be in accordance with manufacturers' recommendations, PennDOT Publication 408 and Roadway Construction (RC) standards or as specified by the Township Engineer.
 - c. Minimum cover from the top of the pipe to the top of subgrade shall be twelve (12) inches.
- 9. Safety features shall be incorporated into the storm sewer system as necessary.
- 10. When allowed, the minimum thickness of any corrugated steel or metal pipe shall be sixteen (16) gauge or as otherwise required by the Municipality for anticipated load conditions.
- 11. Roof and basement drains must not be connected to streets, sanitary or storm sewers or roadside ditches in order to promote overland flow and infiltration/percolation of stormwater unless otherwise approved by the Township.

306.4 - Inlets / Manholes / Junctions

- A. In general, inlets, manholes, grates, covers, frames and the like shall conform to the Pennsylvania Department of Transportation Standard Specifications, Publication 408 and RC Standards. Design shall be performed in accordance with the Pennsylvania Department of Transportation or Federal Highway Administration Standards. Additional alternate criteria may be required following review of the Township Engineer.

1. Inlets shall be spaced such that they are not subject to flows higher than five (5) cubic feet per second or at a distance greater than four hundred feet (400) along curbed streets and at low points on sag vertical curves with an inlet on each side of the street. Additional inlets shall be placed at the upper side of street intersections, to prevent stormwater from crossing the intersection. Inlets are not allowed on the intersection radii. In no case shall inlets be placed at a location where they function at less than sixty-five (65%) percent efficiency based on criteria in the PennDOT Design Manual. Design shall be such that the maximum allowable spread of water on streets shall not exceed one-half (1/2) of the travel lane or 3-inches in the gutter line, whichever is more restrictive. At intersections, depth of flow shall not exceed 1" for the 25-year storm event. .
2. Inlets shall have weep holes placed at the appropriate elevations to drain the bottom of the inlet box and the subgrade prior to placing the base and surface courses.
3. Where structures are subject to traffic loads, the structure shall be traffic rated.
4. Inlet tops in residential developments shall be bicycle safe unless otherwise approved.
5. Manholes shall not be placed more than five hundred (500) feet apart. Additionally, manholes shall be placed at points of change in horizontal and/or vertical direction of storm sewers. Inlets may be substituted for manholes where they will serve as a means of intercepting runoff.
6. If less than a forty-eight (48) inch diameter, curves in pipes or box culverts, without junction are prohibited. Tee joints, elbows, and wyes are always prohibited.
7. In all cases inlet and catch basin tops shall be designed and installed level with the road surface.
8. Inlets over four feet in depth shall be provided with steps for access. Inlets over 8-feet in depth may require structural design subject to recommendation of the Township Engineer.
9. Inlets shall be sumped up to 2" below grade as directed by the Township Engineer.

306.5 – Channels and Culverts

A. Culvert Design

In cases where drainage is collected by means of a headwall, and inlet or outlet conditions control, the pipe shall be designed as a culvert.

1. The minimum diameter of the culvert shall be eighteen (18) inches. Design shall be in accordance with the U.S. Federal Highway Administration design procedure.
2. The maximum headwater to diameter (HW/D) ratio for inlet control shall be 1.25 or such that water surface elevation is one half (1/2) foot below the edge of street

grade during a twenty-five (25) year storm event, whichever is more stringent. Roadway shall not be overtopped for a 100-year storm event.

3. Headwalls and endwalls shall be provided for all culverts unless otherwise approved by the Township Engineer. Material shall be reinforced concrete unless otherwise approved. Headwalls greater than five (5) feet in height shall be designed by a Professional Engineer.
4. Culvert pipe and material shall be the same as that required for storm sewers
5. All applicable modeling results, calculations and supporting documentation shall be submitted.

B. Channel Design

1. Manning's equation shall be used for the design of all open channels. Complete calculations shall be submitted which detail flow, depth, and velocity. For channels and swales, design for Erosion Control must be provided.
2. All channels shall be designed to prevent erosion of the channel bottom and sides. The flow velocity in all vegetated drainage channels shall not exceed the maximum permissible velocity to prevent soil erosion. Stabilization techniques such as rip-rap, sodding, geo-fabrics and/or premanufactured products shall be utilized where necessary to minimize erosion potential.
3. The design of swales and channels shall, as a minimum, conform to the design procedures as outlined by (a) The Federal Highway Administration, and (b) The Pennsylvania Department of Environmental Protection, Bureau of Soil and Water Conservation, Erosion and Sediment Pollution Control Manual.
4. Where swales are installed, and vegetative stabilization has not or will not occur between November 1 and March 1, other means of temporary stabilization shall be provided.
5. Design criteria for swales and channels shall be the same as that required for storm sewers.
6. Swales must be designed and constructed with a uniform slope to avoid ponding within the swale. Swales designed or constructed at less than 1.5% slope may be required to include an underdrain in the swale bottom.

306.6 – Stormwater Management Facilities

A. General Design Criteria

1. Peak discharge and runoff shall be computed using the soil-cover complex method contained in the "Urban Hydrology for Small Water Sheds", Technical Release No. 55, published by the Engineering Division, Soil Conservation Service, United States Department of Agriculture. Alternate methodology and /or computing software may be used subject to approval by the Township Engineer.
2. Stormwater shall not be re-routed or concentrated in a manner which is inconsistent with downstream conditions or where downstream properties are

likely to be affected. In addition the proposed stormwater discharge at the perimeter of the site shall not exceed the capacity of any existing facility nor shall it alter the pre-development flow characteristics.

All new concentrated discharges of stormwater onto adjacent properties shall be within existing storm sewers or channels. The Municipality shall require written acknowledgment or easement from adjacent property owners in the event that these conditions are not met.

3. The Municipality has the authority to require that computed existing runoff rates be reconciled with field observations and conditions. If the designer can substantiate through actual physical calibration that more appropriate runoff and time-of-concentration values should be utilized at a particular site, then appropriate variations may be made upon review and recommendations of the Township Engineer. Calibration shall require detailed gauge and rainfall data for the particular site in question.
4. The design of all stormwater management facilities shall incorporate sound engineering principles and practices. The Municipality reserves the right to disapprove any design that would result in the occupancy or continuation of an adverse hydrologic or hydraulic condition within the watershed.

306.7 – Detention Basins

A. Basin Design Criteria

1. Basins shall provide control of post development peak runoff rates as specified in Section 304 of this Ordinance.
2. In locations where known drainage or flooding problems exist and where stormwater management has not been previously provided and it is determined that the proposed development may contribute to the problem it may be recommended by the Township Engineer that the discharge of basins or other stormwater management peak flow rate controls be such that the post-development release rate from storms up to the ten (10) year frequency be limited to the pre-development flow rate from a two (2) year frequency storm.
3. Basin Routing techniques shall be as approved by the Township Engineer.

B. Basin Construction Standards

1. Basins shall not be located over any existing or proposed utility lines.
2. The maximum slope of earthen embankments shall be four (4) to one (1), with three (3) to one (1) allowed following review and recommendation from the Township Engineer. The top or toe of any slope shall be located a minimum of twenty-five (25) feet from adjacent property lines, except for a downstream property line where there shall be sufficient additional distance for energy dissipation and for access of maintenance equipment but in no case shall be less than forty (40) feet unless approved otherwise by the Township. Greater slopes may be allowed with the provision of a design basis which considers fill material and stabilization where approved by the Township Engineer.

In areas which are not easily accessible for maintenance, side slopes shall not exceed five (5) to one (1).

3. Where possible the side slopes and basin shape shall blend with the natural topography.
4. The minimum top width of detention basin berms shall be six (6) feet unless the drainage area is greater than 5 acres in which case the minimum embankment width must be eight (8) feet.
5. All basins shall have provisions for de-watering so as not to create unmaintainable conditions. The minimum grade of the basin floor shall be two (2%) percent to insure proper drainage towards the outlet structure. One (1%) percent may be allowed following review and recommendation of the Township Engineer or if a paved or stabilized low flow channel is provided.
6. All submitted basin plans shall indicate the construction specifications and compaction requirements to be used during construction. All earth fill dams shall be designed and certified by a Professional Engineer. Construction specifications shall be reviewed and approved by the Township Engineer.
7. A cutoff trench shall be excavated along the centerline of any dam on an earth fill embankment. The minimum depth shall be three (3) feet. The minimum bottom width shall be ten (10) feet or wide enough to permit operation of compaction equipment.
8. A minimum of six (6) inches of topsoil shall be placed on all areas affected by the basin construction (i.e. basin floor, side slopes, top of berm, and the like) to allow for the establishment of vegetation.
9. All basins shall be stabilized using methods acceptable to the United States Department of Agriculture Soil Conservation Service.
10. The maximum water depth of a finished detention basin (measured from the lowest point in the basin floor to the crest of the emergency spillway) shall not exceed eight (8) feet unless otherwise approved by the Township Engineer.
11. Fencing: Any stormwater management facility that is designed so that it detains water on a temporary or permanent basis is subject to the following fencing regulations:
 - a. Fencing is required for facilities in which a water depth can exceed four (4) feet or greater or where a public safety hazard is deemed possible by the Township Engineer. In determining the need for fencing, the Township Engineer shall consider at a minimum, the following:
 - 1) Depth of pool
 - 2) Detention or dewatering time of the facility
 - 3) Accessibility of the facility

- 4) Proximity of the facility to existing or potential residential development or other development that would expose public to safety risks.
- b. All gates opening through a fence enclosure shall be equipped with a self-closing and self-locking device for keeping the gate securely closed at all times.
 - c. Fence height shall be a minimum of 4 feet unless located within 300 feet of a residence or active public recreation area; in which case they must be a minimum of 6 feet in height. Fences shall be equipped with a minimum 8 foot vehicle gate.
 - d. Fence Design Criteria – The following are the allowable type fences for safety around Stormwater Management basins.
 - 1) Chain Link Fence- Top of the fence shall be a minimum height as specified with no gap between ground and wire fencing. Fence posts shall be a maximum of 8' to 10' feet apart.
 - 2) Split Rail Fence- The top of the fence shall be a minimum height as specified. Fence posts shall be between 8' to 10' apart. When wire gauge fence (maximum of 2"x4" wire opening) is required it shall be stapled to the front (outside) of the split rail fence with no gap between ground and wire fencing.
 - 3) Board on Board Fence- The top of the fence shall be a minimum height as specified with a maximum of 16" between boards. When wire gauge fence (maximum of 2"x4" wire opening) is required it shall be stapled to the front (outside) of the fence and the fence posts with no gap between ground and wire fencing. Fence posts shall be between 8' to 10' apart.
 - e. All stormwater management facility fencing must include an affixed sign reading "Stormwater Management Facility – No Unauthorized Entry".
12. A minimum of one (1) foot freeboard shall be provided above the basin water surface elevation during a one hundred (100) year frequency storm.
 13. Minimum floor elevations for all structures shall be two (2) feet (minimum) above the basin water surface elevation during a one hundred (100) year frequency storm. If basements will be provided, detailed calculations and water proofing design shall be provided which addresses the effects of stormwater on the structure.
 14. The Municipality may, upon recommendation of the Township Engineer, impose additional requirements on earth fill dams for the safety and welfare of the Municipality.
 15. For sites of geologic concern, a geotechnical analysis and design of the site as it relates to the proposed basin shall be provided.

C. Emergency Spillway Standards

1. Minimum freeboard, or the distance between the design flow elevation and the top of the settled basin embankment, shall be one (1) foot for a one hundred (100) year frequency storm.
2. Emergency spillway design should be based on a one hundred (100) year design storm when neglecting the capacity of the outlet structure and outfall culvert.
3. Emergency spillways shall be constructed on undisturbed earth, where possible. Emergency spillways shall be constructed of vegetated earth, reinforced concrete or concrete mound slabs. Emergency spillways shall NOT discharge stormwater over earthen fill or other easily erodible material without adequate protection against soil erosion. Detailed calculations and design shall be submitted. Downstream channels shall be of adequate design to convey flows from the emergency spillway to an existing stream, storm sewer or other approved discharge point.

D. Outlet Pipes and Structures

The following measures shall be incorporated into the design and construction of all outlet structures and pipes. Supporting calculations and drawings shall be submitted.

1. Antiseep collars shall be installed around all outlet pipes through embankments. The antiseep collars and their connections to the pipe barrel shall be watertight. Design calculations in accordance with the United States Department of Agriculture Soil Conservation Service shall be submitted.
2. Temporary sedimentation controls shall be provided during construction to prevent the flow of sediment-laden runoff through the basin outlet pipe. Such measures may include temporary riser pipes, rock-filled gabions, plywood stand boxes, silt fences, skimmers and the like. Design of such measures shall comply with the requirements of the YCCD.
3. Energy dissipation shall be provided at the outlet of detention basins, along outfall channels, and at the discharge end of all conveyance pipes.
4. Outlet control structures shall be constructed to prevent flotation.
5. Outlet control structures shall be equipped with a childproof, non-clogging, removable, trash rack for all openings larger than twelve (12) inches in diameter.
6. All pipes through earthen embankments shall be of a type, for which watertight joint systems are available. Outfall pipes and culverts shall be reinforced concrete or HDPE unless otherwise approved by the Township Engineer.

- E. Where required by the Municipality an analysis shall be conducted of the conditions downstream of the discharge from the property proposed for development. Such analysis shall consider existing and proposed flow rates, velocities, potential for erosion, and expected water surface elevations in relation to existing structures or properties. Such downstream analysis shall be submitted to the Township Engineer and where deemed necessary, to the YCCD.

306.8 – Subsurface Disposal / Infiltration / Retention Basin Systems

A. Installation Requirements

1. The following procedures and materials shall be required for all subsurface facilities:
 - a. Excavation for infiltration facility shall be performed with equipment which will not compact the bottom of the seepage bed, infiltration trench or like facility.
 - b. The bottom of the bed or trench shall be roughened prior to placement of aggregate.
 - c. Only clean, open graded aggregate, free of fines, shall be used in subsurface systems.
 - d. The top, sides, and bottom of all seepage beds, infiltration trenches, or like facilities shall be covered with a drainage filtration fabric which meets the requirements of the PennDOT, Publication 408 for Class I Geofabrics.
 - e. All pipes leading into subsurface drainage systems shall be equipped with screening devices to prevent debris from entering the system.
 - f. The bottom of all subsurface disposal or retention basin systems shall be a minimum of twelve (12) inches above the limiting zone as established by the site specific soil profile. Depths of less than twelve (12) inches above the limiting zone will only be allowed where the developer provides a written report certified by a Professional Engineer, geologist, or hydrogeologist, which certifies that the condition will not create an environmental hazard.
 - g. Inspection points, cleanouts and overflow facilities shall be provided for subsurface disposal systems.
 - h. All subsurface stormwater disposal systems or retention basins shall be located a minimum of one hundred (100) feet from any potable water wells unless otherwise approved.

306.9 – Basins with Permanent Pools (Wet Basins)

- A. Basins designed to have a permanent pool of water stored in the reservoir shall conform to the design standards of detention or retention basins. Where deemed to be necessary, after consulting with the Township Engineer, the Township may impose additional criteria for design and construction of wet basins. Earthen embankment designs shall be sealed by a registered professional engineer experienced in such design.
- B. Embankments shall have a slope not exceeding four (4) horizontal to one (1) vertical.
- C. Adequate stabilization shall be provided to control anticipated erosion due to wave or water level fluctuation.

- D. Where necessary wet basin embankments shall be protected from rodent intrusion.

Section 307. – Riparian Buffers/ Riparian Forest Buffers

Where an applicant proposes to utilize riparian buffers as the means to meet the requirements of this Ordinance, said riparian buffers shall be established and/or maintained in accordance with the BMP Manual or the publication *Riparian Forest Buffer Guidance*, published November, 2010 by the Pennsylvania Department of Environmental Protection, and as may be amended or updated.

Section 308. – Stormwater Management, Groundwater Recharge and the Relationship to Central Sanitary Sewer Systems.

- A. It is recognized that modern stormwater management techniques are being implemented in part to encourage groundwater recharge.
- B. Where stormwater management plans are being proposed in conjunction with Subdivision and Land Development plans which also include central sanitary sewer collection systems; subject to review of the applicable utility authority, in areas of groundwater influence on sanitary sewer trenches, earth dams shall be installed in sanitary sewer trenches. Earth dams shall meet standards of the utility authority or as directed by the Township Engineer.

Section 309. – Stormwater Management in Areas of Steep Slopes

- A. It is recognized that a portion of the Township contains areas of steep slopes and that some development may, under special circumstances, be allowed in these areas in accordance with Section 305 of the Township Zoning Ordinance. Due to the potentially erosive nature of these areas the Township may require, upon recommendation of the Township Engineer, an alternative analysis for development in steep slope areas with regard to stormwater management. An Alternative Analysis must be prepared by, or under the direction of, a Professional Engineer experienced in Stormwater Management. The following items should be included/addressed in the alternative analysis:
 - 1. An explanation of how disturbance will be minimized
 - 2. The reasoning for the choice of stormwater management BMP's. As part of the Alternative Analysis, limitations of specific BMP's must be considered as part of the selection. Reference may be made to Appendix C (Table 7.2 – Physical Feasibility Matrix) from the Northern York Regional Comprehensive Plan dated October, 2003.
 - 3. An explanation of how washout of roads/culverts/channels will be avoided.
 - 4. A soil analysis identifying, at a minimum, soil type, class, susceptibility to erosion, permeability and/or hydraulic linear loading rate.
 - 5. A geotechnical analysis may be required in areas of highly erosive soils.
 - 6. A downstream impact analysis (where applicable)
 - 7. An Erosion and Sedimentation Control / NPDES Plan must be approved by the County Conservation District.
 - 8. The Operations and Maintenance (O&M) Agreement must specifically address procedures for cleaning/maintaining each proposed BMP.
 - 9. Upon review of the Alternative Analysis the Township may require additional or varied BMP's to address the site conditions.
 - 10. In addition to inspection requirements in Section 802 the Township may require additional inspections.

**ARTICLE IV - STORMWATER MANAGEMENT (SWM)
SITE PLAN REQUIREMENTS**

Section 401. Plan Requirements

Although not a requirement of this Ordinance, prior to proceeding with SWM Site Plan preparation and submission, the applicant is encouraged to request a pre-application meeting with the Township's Engineer and a staff member of the YCCD to discuss the plan concept and responsibility for submission of required documents and information.

Sketch Plan:

When an application proposes equal to or less than 1000 SF of impervious area and a stormwater management site plan is not required, the application shall be accompanied by a sketch plan. The sketch plan shall include those items found as attached to the application form.

The following items shall be included in the SWM Site Plan:

- A. Appropriate sections of the Municipality's Subdivision and Land Development Ordinance, and other applicable ordinances of the Municipality regarding subdivision and land development plan preparation and applicable plan requirements shall be followed in preparing all SWM Site Plans, regardless of whether or not a SWM Site Plan involves a subdivision and/or land development plan.
- B. The Municipality shall not approve any SWM Site Plan that is deficient in meeting the requirements of this Ordinance. At its sole discretion, and in accordance with this Article, when a SWM Site Plan is found to be deficient, the Municipality may either disapprove the submission, or, in the case of minor deficiencies, the Municipality may accept the submission of a revised SWM Site Plan as noted in Section 404 of this Ordinance.
- C. Provisions for permanent access or maintenance easements for all physical SWM BMPs, such as ponds and infiltration structures, as necessary to implement the Operation and Maintenance (O&M) Plan discussed in Item E.9 below.
- D. A signature block for approval/acknowledgement of plan approval by the municipality or its designated official.
- E. If not required by the Municipal Subdivision and Land Development Ordinance, as specified in Section 401.A. of this Ordinance, the SWM Site Plan shall also provide the following information where applicable:
 - 1. The overall stormwater management concept for the project, including any additional information required for a PCSWM Plan as applicable.
 - 2. A determination of site conditions in accordance with the BMP Manual. A detailed site evaluation shall be completed for projects proposed in areas of carbonate geology or karst topography, as well as for other environmentally sensitive areas, whether natural or manmade, including floodplains, streams, lakes, ponds, hydric soils, wetlands, brownfields, wellhead protection zones and steep slope areas in accordance with the Steep Slope Conservation Overlay (205) in the Franklin Township Zoning Ordinance.

3. Stormwater runoff design computations, and documentation as specified in this Ordinance, or as otherwise necessary to demonstrate that the maximum practicable measures have been taken to meet the requirements of this Ordinance, including the recommendations and general requirements in Section 301.
4. Expected project time schedule.
5. A soil erosion and Sediment Control Plan, where applicable, as prepared for, reviewed, and approved by the YCCD.
6. The effect of the project in terms of runoff volumes, water quality, and peak flows on surrounding properties and aquatic features, and on any existing stormwater conveyance system that may be affected by the project.
7. Plan and profile drawings of all SWM BMPs, including drainage structures, pipes, open channels, and swales.
8. The locations of existing and proposed on-lot wastewater facilities and water supply wells.
9. An O&M Plan for all existing and proposed physical stormwater management facilities. This plan shall address long-term ownership and responsibilities for O&M as well as schedules and costs for O&M activities.
10. A description of permanent stormwater management techniques, including the construction specifications of the materials to be used for stormwater management facilities.
11. A notarized signature of the owner of the parcel for which the SWM Site Plan is proposed.
12. Existing and proposed land uses.
13. The location of the proposed regulated activity relative to streets, municipal boundaries, and other significant manmade features.
14. Significant physical features and associated boundary limits including flood hazard areas, sinkholes, existing drainage courses, steep slopes and areas of natural vegetation.
15. The location of existing and proposed utilities, stormwater facilities, sanitary sewers, and water lines on the parcel and within 50 feet of property lines.
16. Proposed changes to the land surface and vegetative cover, and the type and amount of existing and proposed impervious area.
17. Existing and proposed structures, buildings, streets, driveways, access drives, and parking areas.
18. Contour intervals as required by the Franklin Township Subdivision and Land Development Ordinance.

19. The name of the development, the name and address of the owner of the property, and the name and address of the individual or firm preparing the Plan. Also to be included are the name, address, signature and seal of any registered surveyor (attesting the accuracy of the boundary survey), professional engineer, landscape architect, or professional geologist (for geomorphological assessments) contributing to and/or with a responsibility for any aspect of the Plan where applicable.
20. Preferred graphic and written scale of one (1) inch equals no more than 50 feet. For parcels of 20 acres or more, the preferred scale is one (1) inch equals no more than 100 feet. Dependent upon site conditions, an alternative scale proposed by the applicant or his designee may be accepted by the Municipality.
21. North point (arrow).
22. A map showing all existing manmade features beyond the subject parcel's boundary lines that will be affected by the proposed regulated activities.
23. Horizontal and vertical profiles of all open channels, including hydraulic capacity.
24. A note on the plan indicating the location, and responsibility for maintenance of, SWM facilities and/or easements that would be located on adjoining properties as a result of proposed regulated activities, and the location of such facilities and/or easements.
25. A hydrogeologic assessment of the effects of stormwater runoff on sinkholes where present.
26. The effect of the proposed regulated activity in terms of runoff volumes and peak flows on adjacent properties and/or any existing municipal stormwater collection system that may receive runoff from the project site.
27. Drainage flow pathways.

Section 402. Plan Submission

- A. Copies of the SWM Site Plan and accompanying documentation shall be submitted as follows:
 1. Two (2) copies to the Municipality Secretary.
 2. One (1) copy to the Township Engineer.
 3. One (1) copy to the YCCD(if an NPDES permit is required).
 4. One (1) copy to the York County Planning Commission (only when a SWM Site Plan accompanies a subdivision/land development plan application).
- B. Additional copies shall be submitted as requested by the Municipality or DEP.
- C. The plan submission must be accompanied by a completed application and accompanying application fee.

Section 403. Plan Review and Approval Procedure

A. SWM Site Plans shall be reviewed by the municipality for consistency with the provisions of this Ordinance.

B. Modification Requests:

1. When reviewing a SWM Site Plan, whether or not the SWM Site Plan is included in a subdivision and/or land development plan application, the Municipality's governing body may, after consulting with DEP as noted in Section 301.C. of this Ordinance, grant a modification of the requirements of one or more provisions of this Ordinance if the literal enforcement will enact undue hardship because of peculiar conditions pertaining to the land in question, provided that such modification will not be contrary to the public interest and that the purpose and intent of the Ordinance is observed.
2. All requests for a modification from an applicant shall be in writing and shall accompany and be a part of the application for approval of a SWM Site Plan and/or a subdivision or land development plan as applicable. 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.
3. The governing body of the Municipality shall keep a written record of all action on requests for modifications. The response of any consultation and/or review by DEP shall be included as an original report if available or otherwise documented in the required written record.

C. SWM Site Plan Review and Approval Procedure:

1. If a SWM Site Plan is not submitted as a component of a subdivision and/or land development plan, the review of the SWM Site Plan, recommendations, approval, approval with conditions, or disapproval shall occur within 45 calendar days of a complete submission to the Municipality. Where the applicant submits revisions to a previously submitted SWM Site Plan, either because the applicant has elected to revise the SWM Site Plan or as a result of a determination by the Municipality that a revision is necessary to meet the requirements of this Ordinance, this 45-day period shall be restarted at the time of acceptance of a revised plan submission by the Municipality.
2. If a SWM Site Plan is submitted as a component of a subdivision and/or land development plan, the SWM Site Plan shall be reviewed in accordance with the review process and time frame established in the Municipality's Subdivision and Land Development Ordinance and in accordance with the MPC.
3. From the time an application for approval of a plat involving a subdivision or land development plan, whether preliminary or final, which includes a SWM Site Plan, is duly filed with the Municipality, no change or amendment of this Ordinance or other governing ordinance or plan shall affect the decision on such application in accordance with the provisions of the governing ordinances or plans as they stood at the time the application was duly filed, as specified in Section 508(4)(I) of the MPC.

D. Decision Notification Procedure:

In all cases, the decision of the Municipality or its designated official to approve or disapprove the SWM Site Plan shall be in writing and shall be delivered to the applicant no

later than 15 days following the decision. If the SWM Site Plan is disapproved, the written decision by the Municipality shall specify the defects in the application, describe the requirements which were not met, and shall cite the provisions of the Ordinance relied upon. If the SWM Site Plan is approved with conditions, the notification to the applicant shall state the acceptable conditions for approval and the time limit for satisfying such conditions, as established by the Municipality.

Section 404. Revision of Plans

A revision to a previously submitted SWM Site Plan that involves a change in SWM BMPs, stormwater management facilities, or changes in analytical techniques, or that involves the relocation or redesign of SWM BMPs, or that is necessary because soil or other conditions are not as stated on the SWM Site Plan, as determined by the Municipality, shall require a re-submission of the revised SWM Site Plan in accordance with this Article, including applicable fees. For NPDES permitted sites, any revised SWM Site Plan shall also be re-submitted to the YCCD for review. In the case of a SWM Site Plan which contains minor deficiencies, such as a missing label, omission of a required note or minor construction detail, as determined by the Municipality, the Municipality may accept a re-submission of such SWM Site Plan without the requirement of a review fee, or for a lesser fee as may be determined from time to time.

Section 405. Re-submission of Disapproved SWM Site Plans

A disapproved SWM Site Plan may be resubmitted, with the revisions addressing the Municipality's concerns as stated regarding the original submission, to the municipality in accordance with this Article. The applicable review fee must accompany the submission of a revised SWM Site Plan, unless such fee is waived by the Municipality. (See Section 404.)

Section 406. Authorization to Construct and Term of Validity

A. SWM Site Plans Independent of Subdivision and Land Development Plans

The Municipality's approval of a SWM Site Plan, when such Plan is submitted independent of a subdivision and/or land development plan, authorizes the regulated activities contained in the SWM Site Plan for a maximum term of validity of five (5) years following the date of approval. The Municipality may, in its sole discretion, specify a term of validity shorter than five (5) years for any specific SWM Site Plan, particularly if the nature of the proposed SWM facilities require more frequent maintenance and/or short-term replacement of certain components. Terms of validity shall commence on the date the Municipality signs the approval for an SWM Site Plan. If an approved SWM Site Plan is not completed according to Section 407 within the term of validity, then the Municipality may consider the SWM Site Plan disapproved and may revoke any and all permits. SWM Site Plans that are considered disapproved by the Municipality may be resubmitted in accordance with Section 405 of this Ordinance. In no case shall the approval of a SWM Site Plan obviate the need for other necessary approvals, including but not limited to subdivision or land development approval, zoning approval, building permit, or other federal, state, or local permits or approvals.

B. SWM Site Plans Included in a Subdivision and/or Land Development Plan

The Municipality's approval of a SWM Site Plan, which is a part of a subdivision and/or land development plan, authorizes that plan and the regulated activities therein so that no subsequent change or amendment in this Ordinance or other governing ordinances or plans shall be applied to affect adversely the right of the applicant to commence and to complete

any aspect of the approved development in accordance with the terms of such approval within five years from such approval, as specified in Section 508(4)(ii)-(vii) of the MPC.

Section 407. As-Built Plans, Completion Certificate, and Final Inspection

- A. The developer shall be responsible for providing as-built plans of all SWM BMPs included in the approved SWM Site Plan. The as-built plans and an explanation of any discrepancies with the construction plans shall be submitted to the Municipality.
- B. The as-built submission shall include a certification of completion signed by a qualified person verifying that all permanent SWM BMPs have been constructed according to the approved plans and specifications. If any licensed qualified person contributed to the construction plans, then a licensed qualified person must sign the completion certificate.
- C. After receipt of the completion certification by the Municipality, the Municipality may conduct a final inspection to verify compliance with, and accuracy of, the as-built plans.

ARTICLE V - OPERATION AND MAINTENANCE

Section 501. Responsibilities of Developers and Landowners

- A. The Municipality shall make the final determination on the continuing maintenance responsibilities prior to final approval of the SWM Site Plan. The Municipality may require a dedication of such facilities as part of the requirements for approval of the SWM Site Plan. Such a requirement is not an indication that the Municipality will accept the facilities. The Municipality reserves the right to accept or reject the ownership, maintenance, and operating responsibility for any portion of the stormwater management facilities and controls.
- B. Facilities, areas, or structures used as SWMBMP's shall be enumerated as permanent real estate appurtenances and recorded in the York County Recorder of Deeds Office as deed restrictions/protective covenants or easements that run with the land.
- C. The O&M Plan shall be recorded as a restrictive deed covenant that runs with the land.
- D. The Municipality may take enforcement actions against an owner for any failure to satisfy the provisions of this Article.

Section 502. Operation and Maintenance Agreements

- A. Prior to final approval of the SWM Site Plan, the property owner shall sign and record an O&M Agreement (see Appendix A) covering all stormwater control facilities which are to be privately owned.
 - 1. The owner, successor and assigns shall maintain all facilities in accordance with the approved maintenance schedule in the O&M Plan.
 - 2. The owner shall convey to the Municipality easements to assure access for periodic inspections by the Municipality and maintenance, as necessary.
 - 3. The owner shall keep on file with the Municipality 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 by the owner to the Municipality within ten (10) business days of the change.
- B. The owner is responsible for operation and maintenance (O&M) of the SWM BMPs. If the owner fails to adhere to the O&M Agreement, the Municipality may perform the services required and charge the owner appropriate fees. Nonpayment of fees may result in a lien against the property.
- C. The Municipality is exempt from the requirement to sign and record an O&M Agreement.

Section 503. Performance and Maintenance Guarantee

For SWM Site Plans that involve subdivision and land development, the applicant shall provide a financial guarantee to the Municipality for the timely installation, proper construction and maintenance of all stormwater management controls as required by the approved SWM Site Plan and this Ordinance in accordance with the provisions of Sections 509, 510, and 511 of the MPC.

For Stormwater Management Site Plans that are not submitted as part of a Subdivision and Land Development Plan, the work and installation of BMP's must be completed and inspected by the Township prior to receipt of a Use and Occupancy Permit. In the instance where the work does not involve any improvements which will require a Use and Occupancy Permit, the Township may require financial security in accordance with the procedure outlined above in this section.

ARTICLE VI - FEES AND EXPENSES

Section 601. General

The Municipality may charge review fees, including reasonable and necessary charges by the Municipality's professional consultants for review and report thereon to the Municipality. Such review fees shall be reasonable in accordance with the ordinary and customary charges for similar service in the community. Such review fees may include:

- A. Administrative/clerical processing;
- B. Professional review of the SWM Site Plan and as-built plans;
- C. Attendance at meetings;
- D. Inspections; and
- E. Other necessary services

ARTICLE VII - PROHIBITIONS

Section 701. Prohibited Discharges and Connections

- A. Any drain or conveyance, whether on the surface or subsurface, that allows any non-stormwater discharge including sewage, process wastewater, and wash water to enter the waters of this Commonwealth is prohibited.
- B. No person shall allow, or cause to allow, discharges into surface waters of this Commonwealth which are not composed entirely of stormwater, except (1) as provided in Subsection C below and (2) discharges allowed under a state or federal permit.
- C. The following discharges are authorized unless they are determined to be significant contributors to pollution to the waters of this Commonwealth:

- Discharges from firefighting activities	- Flows from riparian habitats and wetlands
- Potable water sources including water line flushing	- Uncontaminated water from foundations or from footing drains
- Irrigation drainage	- Lawn watering
- Air conditioning condensate	- De-chlorinated swimming pool discharges
- Springs	- Uncontaminated groundwater
- Water from crawl space pumps	- Water from individual residential car washing
- Pavement wash waters where spills or leaks of toxic or hazardous materials have not occurred (unless all spill material has been removed) and where detergents are not used	- Routine external building wash-down (which does not use detergents or other compounds)
- Diverted stream flows	- Water discharged in well testing for potable water supplies

- D. In the event that the Municipality or DEP determines that any of the discharges identified in Subsection C significantly contribute to pollution of the waters of this Commonwealth, the Municipality or DEP will notify the responsible person(s) to cease the discharge.

Section 702. Roof Drains

Roof drains and sump pumps shall discharge to infiltration or vegetative BMPs and to the maximum extent practicable satisfy the criteria for DIAs.

Section 703. Alteration of SWM BMPs

No person shall modify, remove, fill, landscape, or alter any SWM BMPs, facilities, areas, or structures in a manner without the written approval of the Municipality, with the exception of necessary maintenance activities such as mowing.

ARTICLE VIII - ENFORCEMENT AND PENALTIES

Section 801. Right-of-Entry

Upon presentation of proper credentials and after reasonable notice, the Municipality may enter at reasonable times upon any property within the municipality to inspect the condition of the stormwater structures and facilities in regard to any aspect regulated by this Ordinance.

Section 802. Inspection

SWM BMPs shall be inspected by the landowner, or the owner's designee, including the Municipality for dedicated and owned facilities, according to the following list of minimum frequencies:

- A. Annually for the first two (2) years.
- B. During or immediately after the cessation of a ten (10)-year or greater storm (4.3 inches in a 24 hour period).
- C. At any other interval as may be specified in the approved O&M Agreement/Plan as may be required by the Township.
- D. The following additional inspection and reporting requirements shall apply to non-residential, multi-family, and residential developments of greater than 10 dwelling units.
 1. Annual inspections shall continue for a total of 5-years.
 2. Once every three (3) years thereafter.
 3. Owner or responsible party shall maintain reasonable records of inspections including where maintenance is required. Those records should be available for review upon request of the Township.

Section 803. Enforcement

- A. It shall be unlawful for a person to undertake any Regulated Activity except as provided in an approved SWM Site Plan, unless specifically exempted in Section 302.
- B. It shall be unlawful to violate any Section of this Ordinance.
- C. Inspections regarding compliance with the SWM Site Plan are a responsibility of the Municipality.

Section 804. Suspension and Revocation

- A. Any approval or permit issued by the Municipality pursuant to this Ordinance may be suspended or revoked for:
 1. Non-compliance with or failure to implement any provision of the approved SWM Site Plan or O&M Agreement/Plan.
 2. A violation of any provision of this Ordinance or any other applicable law, ordinance, rule, or regulation relating to the Regulated Activity.

3. The creation of any condition or the commission of any act during the Regulated Activity which constitutes or creates a hazard, nuisance, pollution, or endangers the life or property of others.
- B. A suspended approval shall be reinstated by the Municipality when:
 1. The Municipality has inspected and approved the corrections to the violations that caused the suspension.
 2. The Municipality is satisfied that the violation has been corrected.
 - C. An approval that has been revoked by the Municipality cannot be reinstated. The applicant may apply for a new approval under the provisions of this Ordinance.
 - D. If a violation causes no immediate danger to life, public health, or property, at its sole discretion, the Municipality may provide a limited time period for the owner to correct the violation. In these cases, the Municipality will provide the owner, or the owner's designee, with a written notice of the violation and the time period allowed for the owner to correct the violation. If the owner does not correct the violation within the allowed time period, the municipality may revoke or suspend any, or all, applicable approvals and permits pertaining to any provision of this Ordinance.

Section 805. Penalties

- A. For violation of any provision of this Ordinance, enforcement shall be brought before a Magisterial District Judge in the same manner provided for the enforcement of summary offenses under the Pennsylvania Rules of Criminal Procedure. Upon conviction thereof, a violator shall be subject to a criminal fine not to exceed One Thousand (\$1,000.00) Dollars per violation plus costs and reasonable attorney's fees incurred by the Municipality, and to a term of imprisonment to the extent allowed by law for the failure to pay a fine pursuant to the Pennsylvania Rules of Criminal Procedure. A separate offense shall arise for each day or portion thereof in which a violation is found to exist or for each section of this Ordinance or other ordinance, which has found to have been violated.
- B. The Municipality may institute injunctive, mandamus, or any other appropriate action or proceeding at law or in equity for the enforcement of this Ordinance. Any court of competent jurisdiction shall have the right to issue restraining orders, temporary or permanent injunctions, mandamus or other appropriate forms of remedy or relief.

Section 806. Appeals

- A. Any person aggrieved by any action of the Municipality or its designee, relevant to the provisions of this Ordinance, may appeal to the Township Board of Supervisors. Any such appeal must be filed in writing with the Municipal Secretary within 30 days of that action and shall specify in detail the basis for the appeal. The failure or refusal to file said appeal or specify the basis of said appeal shall be deemed a conclusive determination as to the issues or matters addressed by the action. If an appeal is timely filed, the Township Board of Supervisors will then hold a Local Agency Law hearing pursuant to 2 Pa. C.S. §101, et seq., within 45 days from the date the appeal was filed and will render a written decision within 15 days from the date such hearing concludes.
- B. If the Board of Supervisors sustains the Municipality's previous action, the person aggrieved may appeal the decision of the Supervisors to the York County Court of Common Pleas within 30 days of the Municipality's decision in accordance with the Local Agency Law (2 Pa. C.S. §101 et seq.) .

ARTICLE IX - MISCELLANEOUS

Section 901. Effective date.

This Ordinance shall be effective at 12:01 A.M. on the 6th day following the adoption hereof by the Board of Supervisors of the Township of Franklin.

ARTICLE X - ENACTMENT

ENACTED AND ORDAINED this day of , 2013.

ATTEST:

**FRANKLIN TOWNSHIP
BOARD OF SUPERVISORS**

Nancy Zentmeyer, Secretary

By: _____
Donald Lerew, Chairman

By: _____
John Shambaugh, Vice-Chairman

By: _____
Edward Campbell, Supervisor

By: _____
Naomi Decker, Supervisor

By: _____
John Holder, Supervisor

APPENDIX A

FRANKLIN TOWNSHIP OPERATION AND MAINTENANCE (O&M) AGREEMENT

STORMWATER MANAGEMENT BEST MANAGEMENT

PRACTICES (SWM BMPs)

THIS AGREEMENT, made and entered into this _____ day of _____, 20____, by and between _____, (hereinafter the "Landowner"), and Franklin Township, York County, Pennsylvania, (hereinafter "Municipality");

WITNESSETH

WHEREAS, the Landowner is the owner of certain real property as recorded by deed in the land records of _____ County, Pennsylvania, Deed Book _____ at page _____, (hereinafter "Property").

WHEREAS, the Landowner is undertaking Regulated Activities on the Property; and

WHEREAS, the SWM BMP Operation and Maintenance (O&M) Plan approved by the Municipality as part of the overall Stormwater Management Site Plan (SWM Site Plan) titled _____ and dated _____ for the property identified herein, which is hereby incorporated by reference and made part hereof, as approved by the Municipality, provides for management of stormwater within the confines of the Property through the use of BMPs; and

WHEREAS, the Municipality, and the Landowner, his successors and assigns, agree that the health, safety, and welfare of the residents of the Municipality and the protection and maintenance of water quality require that on-site SWM BMPs be constructed and maintained on the Property; and

WHEREAS, the Municipality requires, through the implementation of the SWM Site Plan, that SWM BMPs as required by said SWM Site Plan and the Municipal Stormwater Management Ordinance be constructed and adequately operated and maintained by the Landowner, successors, and assigns.

NOW, THEREFORE, in consideration of the foregoing promises, the mutual covenants contained herein, and the following terms and conditions, the parties hereto agree as follows:

1. The Landowner shall construct the BMPs in accordance with the plans and specifications identified in the approved SWM Site Plan.
2. The Landowner shall operate and maintain the BMPs as shown on the approved SWM Site Plan in good working order in accordance with the specific operation and maintenance requirements noted on the approved Plan.

3. The Landowner hereby grants permission to the Municipality, its authorized agents and employees, to enter upon the property, at reasonable times and after reasonable notice and upon presentation of proper credentials, to inspect the BMPs whenever necessary.
4. In the event the Landowner fails to operate and maintain the BMPs per paragraph 2, the Municipality or its representatives may enter upon the Property and take whatever action is deemed necessary to maintain said BMP(s). It is expressly understood and agreed that the Municipality is under no obligation to maintain or repair said facilities, and in no event shall this Agreement be construed to impose any such obligation on the Municipality.
5. In the event the Municipality, pursuant to this Agreement, performs work of any nature, or expends any funds in performance of said work for labor, use of equipment, supplies, materials, and the like, the Landowner shall reimburse the Municipality for all expenses (direct and indirect) incurred within ten (10) days of receipt of invoice from the Municipality, together with attorney fees and ten (10%) percent administrative fee..
6. The intent and purpose of this Agreement is to ensure the proper maintenance of the onsite BMPs by the Landowner; provided, however, that this Agreement shall not be deemed to create or effect any additional liability of any party for damage alleged to result from or be caused by stormwater runoff.
7. The Landowner, its executors, administrators, assigns, and other successors in interests, shall release the Municipality from all damages, accidents, casualties, occurrences, or claims which might arise or be asserted against said employees and representatives from the construction, presence, existence, or maintenance of the BMP(s) by the Landowner or Municipality.
8. The landowner hereby agrees that Stormwater BMP's shall, at a minimum, be inspected in accordance with Section 802 of the ordinance or as may be outlined on the approved SWM Site Plan.

This Agreement shall be recorded at the Office of the Recorder of Deeds of York County, Pennsylvania, and shall constitute a covenant running with the Property and/or equitable servitude, and shall be binding on the Landowner, his administrators, executors, assigns, heirs, and any other successors in interests, in perpetuity.

Landowner:

Signature:

Signature:

Date

Printed Name:

Printed Name:

Franklin Township:

Signature

Date

Printed Name

Title

**COMMONWEALTH OF PENNSYLVANIA
COUNTY OF YORK**

On this, the _____, day of _____, 2013, before me, a Notary Public for the Commonwealth of Pennsylvania, personally appeared _____, husband and wife, the Landowners, and known to me to be the persons described in the foregoing instrument, that they executed the same in the capacity therein stated and for the purpose therein contained.

WITNESS my hand and notarial seal the day and year first above written.

Notary Public
My Commission Expires:

**COMMONWEALTH OF PENNSYLVANIA
COUNTY OF YORK**

On this, the _____, day of _____, 2013, before me, a Notary Public for the Commonwealth of Pennsylvania, personally appeared, who acknowledges himself/herself as the authorized representative of Franklin Township, a municipality organized and existing under the laws of the Commonwealth of Pennsylvania, and that he as such representative being authorized to do so, executed the forgoing instrument for the purposes therein contained by signing the name of the Township by himself/herself as such officer.

WITNESS my hand and notarial seal the day and year first above written.

Notary Public
My Commission Expires:

APPENDIX B

DISCONNECTED IMPERVIOUS AREA (DIA)

B.1. Rooftop Disconnection

When rooftop down spouts are directed to a pervious area that allows for infiltration, filtration, and increased time of concentration, the rooftop may qualify as completely or partially DIA and a portion of the impervious rooftop area may be excluded from the calculation of total impervious area.

A rooftop is considered to be completely or partially disconnected if it meets the requirements listed below:

The contributing area of rooftop to each disconnected discharge is 500 square feet or less, and

The soil, in proximity of the roof water discharge area, is not designated as hydrologic soil group "D" or equivalent, and

The overland flow path from roof water discharge area has a positive slope of five percent (5%) or less.

For designs that meet these requirements, the portion of the roof that may be considered disconnected depends on the length of the overland path as designated in Table B.1.

Table B.1: Partial Rooftop Disconnection	
Length of Pervious Flow Path *	Roof Area Treated as Disconnected
(ft)	(% of contributing area)
0 – 14	0
15 – 29	20
30 – 44	40
45 – 59	60
60 – 74	80
75 or more	100

* Flow path cannot include impervious surfaces and must be at least 15 feet from any impervious surfaces.

B.2. Pavement Disconnection

When pavement runoff is directed to a pervious area that allows for infiltration, filtration, and increased time of concentration, the contributing pavement area may qualify as a DIA that may be excluded from the calculation of total impervious area. This applies generally only to small or narrow pavement structures such as driveways and narrow pathways through otherwise pervious areas, e.g., a walkway or bike path through a park.

Pavement is disconnected if the pavement, or area adjacent to the pavement, meets the requirements below:

- The contributing flow path over impervious area is not more than 75 feet, and
- The length of overland flow is greater than or equal to the contributing length, and
- The soil is not designated as hydrologic soil group "D" or equivalent, and
- The slope of the contributing impervious area is five percent (5%) or less, and
- The slope of the overland flow path is five percent (5%) or less.

If the discharge is concentrated at one or more discrete points, no more than 1,000 square feet may discharge to any one point. In addition, a gravel strip or other spreading device is required for concentrated discharges. For non-concentrated discharges along the edge of the pavement, this requirement is waived; however, there must be a provision for the establishment of vegetation along the pavement edge and temporary stabilization of the area until vegetation becomes stabilized.

APPENDIX C

(from the Northern York County Region Comprehensive Plan - October, 2003)

Table 7.2 Physical Feasibility Matrix

SMP Group	SMP Design	Soils	Water Table	Drainage Area (acres)	Site Slope	Head (ft)
Pond	Micropool ED	HSG A soils may require pond liner.	2 foot separation if hotspot or aquifer	10 min ¹	No more than 15%	6 to 8 ft
	Wet Pond			25 min ¹		
	Wet ED Pond					
	Multiple Pond					
	Pocket Pond	OK	below WT	5 max ²		4 ft
Wetland	Shallow Wetland	HSG A soils may require liner	2 foot separation if hotspot or aquifer	25 min	No more than 8%	3 to 5 ft
	ED Wetland					
	Pond/Wetland					
	Pocket Wetland	OK	below WT	5 max		2 to 3 ft
Infiltration	Infiltration Trench	f _c > 0.5 inch/hr; additional pretreatment required over 2.0 in/hr (See Section 6.3.3)	3 feet, 4 feet if sole source aquifer.	5 max	No more than 15%	1 ft ⁶
	Shallow I-Basin			10 max ³		3 ft
	Dry Well			1 max ⁴		1 ft
Filters	Surface SF	OK	2 feet ⁵	10 max ²	No more than 6%	5 ft
	Underground SF			2 max ²		5 to 7ft
	Perimeter SF			2 max ²		2 to 3 ft
	Organic SF			5 max ²		2 to 4 ft
	Bioretention			5 max ²		5 ft
	Dry Swale	Made Soil	3 to 5 ft			
Open Channels	Wet Swale	Made Soil	2 feet	5 max	No more than 4%	1 ft
	Wet Swale	OK	below WT	5 max		1 ft

Notes:

- 1: Unless adequate water balance and anti-clogging device installed
- 2: Drainage area can be larger in some instances
- 3: May be larger in areas where the soil percolation rate is greater than 5.0 in/hr.
- 4: Designed to treat rooftop runoff only
- 5: If designed with a permeable bottom, must meet the depth requirements for infiltration practices.
- 6: Required ponding depth above geotextile layer.

Application for Stormwater Management Review Franklin Township, York County, PA

General Information:

Owner / Applicant's Name: _____
Address: _____
Telephone Number: _____ Email: _____

Engineer/Surveyor Name: _____
Address: _____
Telephone Number: _____ Email: _____

Site Information:

Address of Property: _____

Tax Map Parcel ID# _____
Parcel Size (approx.) _____

A Sketch Plan must be included and show the following:

- Total existing impervious area on the property _____
- New impervious area proposed _____
- Total impervious area on the property after project completion _____
- Flowpath locations, distance, slope, etc.

Are there any known existing drainage problems or the potential for the proposed project to create drainage problems? (if yes, please explain)

To be completed by authorized municipal official

- Type of Stormwater Management Required:*
- Exempt from stormwater management plan preparation (Complete Application and Sketch Plan) _____
 - Application and stormwater site plan preparation necessary (Complete Appendix B to determine DIA's) _____
 - Formal stormwater management plan preparation (Consult a professional) _____

Determined by: _____ Date: _____

* Based on information provided on this Application and a Sketch Plan received on _____.

**FRANKLIN TOWNSHIP
YORK COUNTY, PENNSYLVANIA
RESOLUTION NO. _____**

**A RESOLUTION OF THE TOWNSHIP OF FRANKLIN, YORK COUNTY,
PENNSYLVANIA, ESTABLISHING FEES FOR THE SUBMISSION,
ADMINISTRATIVE PROCESSING, AND ENGINEERING AND LEGAL REVIEW OF
STORMWATER MANAGEMENT PLANS.**

BE IT RESOLVED, that from on and after date of the adoption of this resolution, the following fees shall be charged for the services specified below:

1. The fee for copies of the stormwater management ordinance shall be \$10.00 per copy. Single sheet copies are available at \$0.25 per sheet.
2. The filing fee for consideration of a Stormwater Management Site Plan shall be broken into categories based upon the type of Plan required. In all instances, the monies shall be deposited with the Township prior to the Township's consideration of the Plan.
3. The filing fee shall be as follows:

Stormwater Exemption or Minor Plan

<u>Plan Type</u>	<u>Administrative Fee (1)</u>	<u>Deposit for Consultants Review/Inspection Fees(2)</u>
Application and Sketch Plan Exempt / no plan required ≤ 1,000 SF of DIA	\$50.00	N/A (3)
Minor Plan Required Activities creating DIA's between 1,000 and 5,000 SF	\$50.00	\$300.00

Formal Stormwater Management Site Plans

<u>Plan Type</u>	<u>Administrative Fee (1)</u>	<u>Deposit for Consultants review/inspection fees(2)</u>
Single Residential Lot/ Unit	\$ 75.00	\$ 675.00
Residential (2 – 5 lots)	\$ 100.00	\$ 1,250.00
Residential (> 5 lots)	\$ 125.00	\$ 2,500.00
Non-Residential (< 1 acre)	\$ 75.00	\$ 750.00
Non-Residential(1 - 5 acres)	\$ 100.00	\$ 1,250.00
Non-Residential (> 5 acres)	\$ 125.00	\$ 2,500.00

- (1) Non-refundable.
- (2) The amount charged to the applicant for professional review fees shall be equivalent to the total charge to the Township from the respective consultant. Any unused portions of the deposit for consultant's review fees shall be returned to the applicant following issuance of a use & occupancy permit. In the event that the actual amount for professional review fees exceeds the amount of the deposit, the applicant shall reimburse the Township in an amount equal to the increased fee.

In instances, where determined by the Township that the project is of a nature that additional monies will be required, the Township reserves the right to require such additional fees in an amount determined by the Township following review with the respective consultant.

- (3) It is not anticipated that Applicants will need to incur engineering/legal review; however, if an Applicant chooses to consult with the Township Engineer and/or Township Solicitor, the cost for such consultation shall be paid by the Applicant in accordance with normal consultant hourly rate charge.
4. The developer or subdivider shall pay the ordinary and customary hourly rate charged to the Township for review and comment on the plan(s) by any consultant the Township deems necessary to review said plan(s). Said charge shall be for time devoted by said consultant on the requested review. The rate charged shall not exceed the rate charged by the consultant to the Township for other work performed at the Township's request for which there is no outside reimbursement. Such costs shall include, but not be limited to:
 - a. Reviewing the plan for conformance to the provisions of the codes and ordinances of the Township.
 - b. Site inspection for conformance to sketch plan / minor stormwater site plan / topographic survey.
 - c. Reviewing cost estimates of required improvements.
 - d. Review/preparation of legal agreements, review of deeds and other legal instruments.
 - e. Such other fees which shall be sufficient to cover the cost of all necessary reviews by the Township's consultants.

The definition of "consultant" shall include the services of the Township Solicitor, Engineer or other professional or specialist whose services the Township deems necessary to the review of any land development plan or subdivision plan.

5. In all instances, any outstanding fees shall be paid prior to the release of the signed Stormwater Management Site Plan/permit or issuance of building permits or use & occupancy permits.
6. The owner/applicant shall be obligated to pay any engineering fees incurred for inspecting and approving final construction pursuant to the Franklin Township Stormwater Management Ordinance and/or the Pennsylvania Municipalities Planning Code. An escrow or deposit may be required to be submitted to the Township in the amount estimated by the Township Engineer to be applied to the cost of inspection fees. The escrow/deposit shall be submitted at such time that the approved Stormwater Management Site Plan or Permit is released to the Developer. Any remaining deposit

monies for engineering and legal review fees may be used toward the inspection fee deposit. Any unused portion of the deposit for inspection fees shall be returned to the applicant at such time that construction of improvements is completed and/or accepted for dedication by the Township. In the event the actual amount of inspection fees exceeds the amount of the deposit, the applicant shall reimburse the Township an amount equal to the increased fee or shall be required to submit additional deposit monies in advance of inspection. In the event that the cost of inspection is anticipated to be significantly greater than the amount of deposit required, the Township may require the estimated total inspection fee be submitted or included in the performance bond to be submitted by the applicant.

THIS RESOLUTION shall be effective immediately.

IN WITNESS WHEREOF, the Board of Supervisors of the Township of Franklin have hereunto set their signatures on this _____ day of _____, 2013.

ATTEST:

Nancy Zentmeyer, Secretary

Donald Lerew, Chairman

John Shambaugh, Vice Chairman

Naomi Decker, Supervisor

John Holder, Supervisor

Edward Campbell, Supervisor