

BOROUGH OF SUGARCREEK

ORDINANCE NO. 268 OF 2011

AN ORDINANCE ADOPTING THE STORMWATER MANAGEMENT ORDINANCE OF THE BOROUGH OF SUGARCREEK

WHEREAS, the purpose of this ordinance is to promote the general health, safety and welfare of the citizens of the Borough of Sugarcreek, Pennsylvania, and to conform to the requirements of the Venango County Stormwater Management Plan; and

BE IT ORDAINED AND ENACTED, by the Council of the Borough of Sugarcreek, Pennsylvania, and it is hereby ordained and enacted by the authority of the same.

SECTION 1: The Stormwater Management Ordinance of the Borough of Sugarcreek is hereby adopted as follows:

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ARTICLE I
GENERAL PROVISIONS

A. SHORT TITLE: This Ordinance shall be known and may be cited at the Stormwater Management Ordinance of the Borough of Sugarcreek

B. STATEMENT OF FINDINGS: The Council of the Borough of Sugarcreek finds that:

1. Inadequate management of accelerated stormwater runoff resulting from development throughout a watershed increases flood flows and velocities, contributes to erosion and sedimentation, overtaxes the carrying capacity of existing streams and storm sewers, greatly increase the cost of public facilities to convey and manage stormwater, undermines floodplain management and flood reduction efforts in upstream and downstream communities, reduces groundwater recharge, threatens public health and safety, and increases non-point source pollution of water resources.
2. A comprehensive program of stormwater management, including reasonable regulation of development and activities causing accelerated runoff; is fundamental to the public health, safety, welfare and the protection of the people of the Borough of Sugarcreek and all the people of the Commonwealth, their resources and the environment.
3. Inadequate planning and management of stormwater runoff resulting from land development and redevelopment throughout a watershed can also harm surface water resources by changing the natural hydro logic patterns; accelerating stream flows (which increase scour and erosion of streambeds and stream banks thereby elevating sedimentation); destroying aquatic habitat; and elevating aquatic pollution concentrations and loadings such as sediments, nutrients, heavy metals and pathogens. Groundwater resources are also impacted through loss of recharge.
4. 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.
5. Public education on the control of pollution from stormwater is an essential component in successfully addressing stormwater issues.
6. 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).

C. PURPOSE:

The purpose of this Ordinance is to promote health, safety and welfare within the Borough of Sugarcreek by minimizing the harms and maximizing the benefits described in Article I(B) of this Ordinance through provisions intended to:

1. Meet legal water quality requirements under state law, including regulations at 25 PA Code Chapter 93 to protect, maintain, reclaim and restore the existing and designated uses of the Waters of the Commonwealth.
2. Manage accelerated runoff and erosion and sedimentation problems close to their source, by regulating activities that cause these problems.
3. Preserve the natural drainage systems as much as possible.

4. Maintain groundwater recharge, to prevent degradation of surface and groundwater quality, and to otherwise protect water resources.
5. Maintain existing flows and quality of streams and watercourses.
6. Preserve and restore the flood-carrying capacity of streams and prevent scour and erosion of stream banks and streambeds.
7. Manage stormwater impacts close to the runoff source, with a minimum of structures and a maximum use of natural processes.
8. Provide procedures, performance standards and design criteria for stormwater planning and management.
9. Provide proper operations and maintenance of all temporary and permanent stormwater management facilities and Best Management Practices (BMPs) that are constructed and implemented.
10. Provide standards to meet the NPDES permit requirements.

D. STATUTORY AUTHORITY:

1. Primary Authority: The Borough of Sugarcreek is empowered to regulate these activities by the authority of the Act of October 4, 1978, 32 P.S., P.L. 864 (Act 167), 32 P.S. Section 680.1 et seq, as amended, the Storm Water Management Act, and the Borough Code.
2. Secondary Authority: The Borough of Sugarcreek also is empowered to regulate land use activities that affect runoff by the authority of the Act of July 31, 1968, P.L. 805, No. 247, the Pennsylvania Municipalities Planning Code, as amended.

E. APPLICABILITY:

1. This Ordinance shall apply to all areas of the Borough of Sugarcreek any Regulated Activity within the Borough of Sugarcreek, and all stormwater runoff entering into the Borough of Sugarcreek's separate storm sewer system or combined sewer system from lands within the boundaries of the Borough of Sugarcreek.
2. Earth disturbance activities and associated stormwater management controls are also regulated under existing state law and implementing regulations. This Ordinance shall operate in coordination with those parallel requirements. The requirements of this Ordinance shall be no less restrictive in meeting the purposes of this Ordinance than state law.
3. "Regulated Activities" are any earth disturbance or any activities that involve the alteration or development of land in a manner that may affect stormwater runoff. "Regulated Activities" include, but are not limited to, the following listed items.
 - a. Earth Disturbance Activities
 - b. Land Development
 - c. Subdivision
 - d. Construction of new or additional impervious or semi-pervious surfaces
 - e. Construction of new buildings or additions to existing buildings
 - f. Diversion or piping of any natural or man-made stream channel
 - g. Installation of stormwater management facilities or appurtenances thereto
 - h. Installation of stormwater BMP's.

4. See article III(B) of this Ordinance for Exemption/Modification Criteria.

F. REPEALER:

Any ordinance, ordinance provision(s), or regulation of the Borough of Sugarcreek inconsistent with any of the provision(s) of this Ordinance is hereby repealed to the extent of the inconsistency only.

G. SEVERABILITY:

In the event that a court of competent jurisdiction declares any section(s) or provision(s) of this Ordinance invalid, such decision shall not affect the validity of any of the remaining section(s) or provision(s) of this Ordinance.

H. COMPATIBILITY WITH OTHER ORDINANCE REQUIREMENTS:

Approvals issued or actions taken pursuant to this Ordinance do not relieve the Applicant of the responsibility to comply with or to secure required permits or approvals for activities regulated by another other applicable codes, laws, rules, statutes or ordinances. To the extent that this Ordinance imposes more rigorous or stringent requirements for stormwater management, the specific requirements contained in this Ordinance shall be followed.

I. DUTY OF PERSON 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 also shall include actions as are required to manage the rate, volume, direction and quality of resulting stormwater runoff in a manner which otherwise adequately protects health, property and water quality.

J. MUNICIPAL LIABILITY DISCLAIMER:

1. 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 for damage to persons or property resulting therefrom, or as otherwise imposed by law nor impose any liability upon the Borough of Sugarcreek for damages to persons or property.
2. The granting of a permit which includes any stormwater management facilities shall not constitute a representation, guarantee or warranty of any kind by the Borough of Sugarcreek, 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

A. INTERPRETATIONS: For the purpose of this Ordinance, certain terms and words used herein shall be interpreted as follows:

1. Words used in the present tense include the future tense; the singular number includes the plural; and the plural number includes the singular; words of masculine gender include feminine gender; and words of feminine gender include masculine gender.
2. The word “includes” or “including” shall not limit the term to the specific example, but is intended to extend its meaning to all other instances of like kind and character.
3. The word “person” includes an individual, firm, association, organization, partnership, trust, company, corporation or any other similar entity.
4. The words “shall” and “must” are mandatory; the words “may” and “should” are permissive.
5. The words “uses or occupied” include the words “intended, designed, maintained, or arranged to be used, occupied or maintained”.

B. SPECIFIC TERMS:

ACCELERATED EROSION: The removal of the surface of land through the combined action of human activity and natural processes at a rate greater than would occur under natural processes.

AGRICULTURAL ACTIVITIES: Activities associated with agriculture such as agricultural cultivation, agricultural operation, and animal heavy use areas. This includes the work of producing crops, 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 areas is not considered an Agricultural Activity.

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

APPLICANT: A landowner, developer or other person who has filed an application for approval to engage in any Regulated Activities at a project sit within the municipality.

BEST MANAGEMENT PRACTICES (BMPs): Activities, facilities, designs, measures or procedures used to manage stormwater impacts for Regulated Activities, to meet State Water Quality Requirements, to promote groundwater recharge and to otherwise meet the purposes of this Ordinance. Stormwater BMP’s are commonly grouped into one of two broad categories or measures: “non-structural” or “structural”. “Non-structural” BMPs are measures referred to as operational and/or behavior-related practices that attempt to minimize the contact of pollutants with stormwater runoff whereas “structural” BMPs are measures that consist of physical device or practice that is installed to capture and treat stormwater runoff. “Structural” BMP’s include, but are not limited to, w 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 pavement, 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 Department of Environmental Protection, Bureau of Watershed Management. Pennsylvania Stormwater Best Management Practices Manual, latest edition.

CHANNEL EROSION: The widening, deepening, and headward cutting of small channels and waterways, due to erosion caused by moderate to large floods.

CISTERN: An underground reservoir or tank used for storing rainwater.

CONSERVATION DISTRICT: The Venango Conservation District. The Venango Conservation District has the authority under a delegation agreement executed with the Department of Environmental Protection to administer all or a portion of the regulations promulgated under 25 PA Code Chapter 102.

CULVERT: A structure with appurtenant works that carries a stream and/or stormwater runoff under a road or through an embankment or fill.

DAM: An artificial barrier, together with its appurtenant works, constructed for the purpose of impounding or storing water or another fluid or semifluid, or a refuse bank, fill or structure for highway, railroad or other purposes which does or may impound water.

DESIGN STORM: The magnitude and temporal distribution of precipitation from a storm event measured in probability of occurrence (e.g. a 25-year-storm) and duration (e.g. 24-hours), used in the design and evaluation of stormwater management systems. Also see Return Period.

DESIGNEE: An agent of this municipality and/or agent of the governing body involved with the administration, review or enforcement of any provisions of this Ordinance by contract or memorandum of understanding.

DETENTION BASIN: An impoundment structure designed to manage stormwater runoff by temporarily storing runoff and releasing it at a predetermined rate.

DETENTION VOLUME: The volume of runoff that is captured and released into Waters of the Commonwealth at a controlled rate.

DEVELOPER: A person, partnership, association, corporation or other entity, or any responsible person therein or agent thereof, that undertakes any Regulated Activity of this Ordinance.

DEVELOPMENT SITE – (SITE): The specific parcel of land for which a Regulated Activity is proposed. Also see Project Site.

DISTURBED AREA: An unstabilized land area where an Earth Disturbance Activity is occurring or has occurred.

DOWNSLOPE PROPERTY LINE: That portion of the property line of the land being developed toward which all or a major portion of the overland or pipe flow from the site would be directed.

DRAINAGE CONVEYANCE FACILITY: A stormwater management facility designed to convey stormwater runoff and including streams, channels, swales, pipes, conduits, culverts, storm sewers, etc.

DRAINAGE EASEMENT: A right granted by a landowner to a grantee, to allow the use of private land for stormwater management, drainage, or conveyance purposes.

DRAINAGEWAY: Any natural or artificial watercourse, trench, ditch, pipe, swale, channel or similar depression into which surface waters flow.

EARTH DISTURBANCE ACTIVITY: Construction or other human activity which disturbs the surface of the land, including, but not limited to, clearing and grubbing, grading, excavations, embankments, land development, agricultural plowing or tilling, timber harvesting, road maintenance, mineral extraction, and the moving, depositing, stockpiling, or storing of soil, rock or earth materials.

EROSION: The movement of soil particles by the action of water, wind, ice or other natural forces.

EROSION AND SEDIMENT POLLUTION CONTROL PLAN: A plan which is designed to minimize accelerated erosion and sedimentation.

EXCEPTIONAL VALUE WATERS: Surface waters of high quality, which satisfy PA Code Title 25 Environmental Protection, Chapter 93 Water Quality Standards 93.4b(b) relating to anti-degradation, as amended.

EXISTING CONDITIONS: The initial condition of a project site prior to proposed construction. If the initial condition of the site is undeveloped and not forested, the land use shall be considered as “meadow” unless the natural land cover is documented to generate lower Curve Numbers or Rational “C” Coefficient.

FEMA: The Federal Emergency Management Agency.

FLOOD: A general but temporary condition of partial or complete inundation of normally dry land areas from the overflow of streams, rivers and other Waters of the Commonwealth.

FLOOD FRINGE: The remaining portions of the 100-year floodplain outside of the floodway boundary.

FLOODPLAIN: Any land area susceptible to inundation by water from any natural source or delineated by applicable Department of Housing and Urban Development, Federal Insurance Administration Flood Hazard Boundary – mapped as being a special flood hazard area. Included are lands adjoining a river or stream that have been or may be inundated by a 100-year flood. Also included are areas that comprise Group 13 Soils, as listed in Appendix A of the Pennsylvania Department of Environmental Protection (Pennsylvania DEP) Technical Manual for Sewage Enforcement Officers (as amended or replaced from time to time by Pennsylvania DEP).

FLOODWAY: The channel of the watercourse and those portions of the adjoining floodplains that are reasonably required to carry and discharge the 100-year frequency 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 frequency 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 forestland. These include timber inventory and preparation of forest management plans, silvicultural treatment, cutting budgets, logging road design and construction, timber harvesting, site preparation and reforestation.

FREEBOARD: Vertical distance between the elevation of the design high water and the top of a dam, levee, tank, basin, or diversion ridge. The space is required as a safety margin against flow overtopping in a pond or basin.

GRADE: Slope of a road, channel or natural ground specified in percent.

(TO) GRADE: To finish the surface of a roadbed, top of embankment or bottom of excavation.

GROUNDWATER RECHARGE: Replenishment of existing natural underground water.

HEC-HMS MODEL CALIBRATED: (Hydrologic Engineering Center Hydrologic Modeling System) A computer-based hydro logic modeling technique adapted to certain watersheds in Venango County for the Act 167 Plan. The model has been calibrated by adjusting key model input parameters.

HIGH QUALITY WATERS: Surface water having quality, which exceeds criteria necessary to support propagation of fish, shellfish, and wildlife and recreation in an on the water by satisfying PA Code Title 25 Environmental Protection, Chapter 93 Water Quality Standards 93.4b(b), as amended.

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 one of four HSG (A, B, C and D) according to their minimum infiltration rate, which is obtained for bare soil after prolonged wetting. The Natural Resource Conservation Service (NRCS) of the US Department of Agriculture 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 interest may be identified from a soil survey report from the local NRCS office or the County Conservation District.

IMPERVIOUS SURFACE (IMPERVIOUS AREA): A surface that prevents the infiltration of water into the ground. Impervious surface (or areas) include, but are not limited to: roofs, additional indoor living spaces, patios, garages, storage sheds and similar structures, parking or driveway areas, streets and sidewalks. Any surface areas proposed to initially be gravel or crushed stone shall be assumed to be impervious surfaces.

IMPOUNDMENT: A retention or detention basin designed to retain stormwater runoff and release it at a controlled rate.

INFILTRATION STRUCTURES: A structure designed to direct runoff into the ground (e.g., french drains, seepage pits, seepage trench, etc.).

INLET: A surface connection to a closed drain. A structure at the diversion end of a conduit. The upstream end of any structure through which water may flow.

KARST: A type of topography or landscape characterized by surface depressions, sinkholes, rock pinnacles/uneven bedrock surface, steep-sided hills, underground drainage and caves. Karst is formed on carbonate rocks, such as limestone or dolomites and sometimes gypsum.

LAND DEVELOPMENT (DEVELOPMENT): (i) The improvement of one lot or two or more contiguous lots, tracts or parcels of land for any purpose involving (a) a group of two or more buildings, or (b) the division or allocation of land or space between or among two or more existing or prospective occupants by means of, or for the purpose of, streets, common areas, leaseholds, condominiums, building groups, or other features; (ii) Any subdivision of land; (iii) Development in accordance with Section 503(1.1) of the Pennsylvania Municipalities Planning Code, as amended.

MAIN STEM (MAIN CHANNEL): Any stream segment or other runoff conveyance facility used as a reach in the Venango County Act 167 watershed hydrologic model(s).

MANNING EQUATION (MANNING FORMULA): An equation for calculation of velocity of flow in non-pressurized conduits based upon conduit shape, roughness, depth of flow and slope.

MAXIMUM EXTENT PRACTICABLE: A level of implementing Best Management Practices in order to achieve a performance standard specified taking into account the best available technology, cost effectiveness and other competing issues such as public safety and welfare, natural resources, and geographic features.

MUNICIPAL ENGINEER: A professional engineer licensed as such in the Commonwealth of Pennsylvania, duly appointed as the engineer for a municipality, planning agency or joint planning commission.

MUNICIPALITY: The Borough of Sugarcreek, Venango County, Pennsylvania.

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES). The federal government's system for issuance of permits under the Clean Water Act, which is delegated to Pennsylvania DEP in Pennsylvania.

NOAA ATLAS 14: Precipitation-Frequency Atlas of the United States, Atlas 14, Volume 2, US Department of Commerce, National Oceanic and Atmospheric Administration, National Weather Service, Hydrometeorological Design Studies Center, Silver Spring, Maryland (most current).

NON-POINT SOURCE POLLUTION: Pollution that enters a water body from diffuse origins in the watershed and does not result from discernible, confined, or discrete conveyances.

NRCS: Natural Resource Conservation Service (previously Soil Conservation Service (SCS)).

OPEN CHANNEL: A drainage element in which stormwater flows with an open surface. Open channels include, but are not limited to, natural and manmade drainageways, swales, streams, ditches, canals, and pipes not under pressure.

OUTFALL: (i) Point where water flows from a conduit, stream, or drain; (ii) "Point Source" as described in 40 CFR § 122.2 at the point where the Borough of Sugarcreek's storm sewer system discharges to surface Waters of the Commonwealth.

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

PENNSYLVANIA DEP: The Pennsylvania Department of Environmental Protection.

PARKING LOT STORAGE: The use of impervious parking areas as temporary impoundments with controlled release rates during rainstorms.

PEAK DISCHARGE: The maximum rate of stormwater runoff from a specific storm event.

PERSON: An individual, partnership, public or private association or corporation, or a governmental unit, public utility or any other legal entity whatsoever which is recognized by law as the subject of rights and duties.

PERVIOUS AREA: Any area not defined as impervious.

PIPE: A culvert, closed conduit, or similar structure (including appurtenances) that conveys stormwater.

PLANNING COMMISSION: The Planning Commission of the Borough of Sugarcreek.

POINT SOURCE: Any discernible, confined, or discrete conveyance, including, but not limited to, any pipe, ditch, channel, tunnel, or conduit from which stormwater is or may be discharged, as defined in state regulations at 25 Pennsylvania Code § 92.1, as amended.

PROBABLE MAXIMUM FLOOD (PMF): The flood that may be expected from the most severe combination of critical meteorological and hydrologic conditions that are statistically possible in any area. The PMF is derived from the probable maximum precipitation (PMP) as determined on the basis of data obtained from the National Oceanographic and Atmospheric Administration (NOAA).

PROJECT SITE: The specific area of land where any Regulated Activities in the Municipality are planned, conducted or maintained.

PROTECTED WATERSHED: Watershed tributary to Exceptional Value Waters or High Quality Waters.

QUALIFIED PROFESSIONAL: Any person licensed by any applicable agency of the Commonwealth of Pennsylvania, or otherwise qualified by law to perform the work required by this Ordinance.

RATIONAL FORMULA: A rainfall-runoff relation used to estimate peak flow.

REDEVELOPMENT: Earth disturbance activities on land, which has previously been developed.

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 Chapter 92, Chapter 102, or the Clean Streams Law, as amended.

RELEASE RATE: The percentage of pre-developed peak rate of runoff from a site or subwatershed area to which the post-development peak rate runoff must be reduced to protect downstream areas.

RELEASE RATE DISTRICT: Those subwatershed areas in which post-development flows must be reduced to a certain percentage of pre-development flows as required to meet the plan requirements and the goals of Act 167.

RETENTION BASIN: An impoundment in which stormwater is stored and not released during the storm event. Stored water may be released from the basin at some time after the end of the storm.

RETENTION VOLUME/REMOVED RUNOFF: The volume of runoff that is captured and not released directly into the surface Waters of the 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 recur. For example, the 25-year return period rainfall would be expected to recur on the average once every 25 years; or stated in another way, the probability of a 25-year storm occurring in any one given year is 0.04 (i.e. a 4% chance).

RIPARIAN BUFFER: A vegetated area bordering perennial and intermittent streams and wetlands, that serves as protective filter to help protect streams and wetlands from the impacts of adjacent land uses.

RISER: A vertical pipe extending from the bottom of a pond that is used to control the discharge rate from the pond for a specified design storm.

ROAD MAINTENANCE: Earth disturbance activities within the existing road right-of-way, such as grading and repairing existing unpaved road surfaces, cutting road banks, cleaning or clearing drainage ditches, and other similar activities. Road maintenance activities that do not disturb the subbase of a paved road (such as milling and overlays) are not considered earth disturbance activities.

ROOFTOP DETENTION: Temporary ponding and gradual release of stormwater falling directly onto flat roof surfaces by incorporating controlled-flow roof drains into building designs.

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

RUNOFF CAPTURE VOLUME: The volume of runoff that is captured (retained) and not released into surface Waters of the Commonwealth during or after a storm event.

SEDIMENT: Soils or other materials transported by surface water as a result of erosion.

SEDIMENT BASIN: A barrier, dam, retention or detention basin located and designed to retain rock, sand, gravel, silt or other material by stormwater runoff during earthmoving activities.

SEDIMENT POLLUTION: The placement, discharge, or any other introduction of sediment into Waters of the Commonwealth occurring from the failure to properly design, construct, implement or maintain control measures and control facilities in accordance with the requirements of this Ordinance.

SEDIMENTATION: The process by which mineral or organic matter is accumulated or deposited by the movement of water.

SEEPAGE PIT/SEEPAGE TRENCH: An area of excavated earth filled with loose stone or similar coarse material, into which surface water is directed for infiltration into the ground.

SEMI-PERVIOUS SURFACE: Surfaces that consist of a variety of types of pavement, pavers and other devices that provide infiltration while serving as a structural surface.

SEPARATE STORM SEWER SYSTEM: A conveyance or system of conveyances including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels or storm drains primarily used for collecting and conveying stormwater runoff.

SHEET FLOW: Runoff that flows over the ground surface as a thin, even layer, not concentrated in a channel.

SOIL COVER COMPLEX METHOD: A method of runoff computation developed by the NRCS that is based on relating soil type and land use/cover to a runoff parameter called Curve Number (CN).

SPILLWAY (EMERGENCY): A depression in the embankment of a dam, pond or basin, or other detention structure, that is used to pass peak discharges 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.

STORAGE INDICATION METHOD: A reservoir routing procedure based on solution of the continuity equation (inflow minus outflow equals the change in storage) with outflow defined as a function of storage volume and depth.

STORM FREQUENCY: The number of times that a given storm “event” occurs or is exceeded on the average in a stated period of years. See also Return Period.

STORM SEWER: A system of pipes and/or open channels that convey intercepted runoff and stormwater from other sources, but excluded domestic sewage and industrial wastes.

STORMWATER: Drainage runoff from the surface of the land resulting from precipitation, snow or ice melt.

STORMWATER MANAGEMENT FACILITIES: Any structure, natural or manmade, 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: The Venango County Stormwater Management Plan for managing stormwater runoff in Venango County as required by the Act of October 4, 1978, P.L. 864, (Act 167) and known as the “Storm Water Management Act”.

STORMWATER MANAGEMENT SITE PLAN (SWM SITE PLAN): The plan prepared by the Applicant of his representative indicating how stormwater runoff will be managed at the project site in accordance with this Ordinance.

STREAM ENCLOSURE: A bridge, culvert, or other structure in excess of 100 feet in length upstream to downstream which encloses Waters of the Commonwealth.

SUBWATERSHED AREA: The smallest drainage unit of a watershed for which stormwater management criteria have been established in the Stormwater Management Plan.

SUBDIVISION: The division or re-division of a lot, tract, or parcel or land by any means, into two or more lots, tracts, parcels or other divisions of land, including changes in existing lot lines for the purpose, whether immediate or future, of lease, 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 dwellings, shall be exempt (Pennsylvania Municipalities Planning Code, Act of July 31, 1968, P.L. 805, No. 247).

SWALE: A low-lying stretch of land that gathers or carries surface water runoff.

TIMBER OPERATIONS: See "Forest Management"

TIME OF CONCENTRATION: The time for surface runoff to travel from the hydraulically most distant point of the watershed to a point of interest within the watershed. This time is the combined total of overland flow time and flow time in pipes or channels, if any.

USDA: The United States Department of Agriculture.

WATERCOURSE: A channel or conveyance of surface water, such as a stream or creek, having defined bed and banks, whether natural or artificial, with perennial or intermittent flow.

WATERS OF THE COMMONWEALTH: Rivers, streams, creeks, rivulets, impoundments, ditches, watercourses, storm sewers, lakes, dammed water, wetlands, ponds, springs and other bodies or channels of conveyance of the surface and underground water, or parts thereof, whether natural or artificial, within or on the boundaries of the Commonwealth of Pennsylvania.

WATERSHED: Area drained by a river, watercourse or other surface water, whether natural or artificial.

WETLANDS: Those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for the life in saturated soil conditions, including swamps, marshes, bogs and similar areas. (The term includes but is not limited to wetland areas listed in the State Water Plan, the United States Forest Service Wetlands inventory of Pennsylvania, the Pennsylvania Coastal Zone Management Plan and a wetland area designated by a river basin commission. This definition is used by the United States Environmental Protection Agency and the United States Corps of Engineers.)

ARTICLE III
STORMWATER MANAGEMENT STANDARDS

A. GENERAL REQUIREMENTS:

1. For all Regulated Activities, unless specifically exempted in Article III(B):
 - (a) Preparation and implementation of an approved SWM Site Plan is required.
 - (b) No Regulated Activities shall commence until the Borough of Sugarcreek issues written approval of a SWM Site Plan, which demonstrates compliance with the requirements of this Ordinance.
 - (c) The SWM Site Plan shall demonstrate that adequate capacity will be provided to meet the Volume and Rate Control Requirements, as described under Articles III(D) and III(E) of this Ordinance.
 - (d) The SWM Site Plan approved by the Borough of Sugarcreek, shall be on-site throughout the duration of the Regulated Activities.
2. For all Regulated Earth Disturbance Activities, erosion and sediment control BMPs shall be designed, implemented, operated, and maintained during the Regulated Earth Disturbance Activities (e.g. during construction) to meet the purposes and requirements of this Ordinance and to meet all requirements under Title 25 of the Pennsylvania Code (including, but not limited to Chapter 102 Erosion and Sediment Control) and the Clean Streams Law. Various BMPs and their design standards are listed in the Erosion and Sediment Pollution Control Program Manual (E&S Manual), No. 363-2134-008 (April 15, 2000), as amended and updated.
3. For all Regulated Activities, stormwater BMPs shall be designed, installed, implemented, operated, and maintained to meet the purposes and requirements of this Ordinance and to meet all requirements under Title 25 of the Pennsylvania Code and the Clean Streams Law, conform to the State Water Quality Requirements, meet all requirements under the Storm Water Management Act and any more stringent requirements as determined by the municipality.
4. The municipality may, after consultation with Pennsylvania 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 law, including, but not limited to, the Clean Streams Law.
5. All Regulated Activities shall include, to the maximum extent practicable, measures to:
 - (a) Protect health, safety, and property.
 - (b) Meet the water quality goals of this Ordinance by implementing measures to:
 1. Minimize disturbance to floodplains, wetlands, natural slopes, existing native vegetation and woodlands.
 2. Create, maintain, or extend riparian buffers and protect existing forested buffers.
 3. Provide trees and woodlands adjacent to impervious areas whenever feasible.
 4. Minimize the creation of impervious surfaces and the degradation of Waters of the Commonwealth and promote groundwater recharge.
 5. Protect natural systems and processes (drainageways, vegetation, soils, and sensitive areas) and maintain, as much as possible, the natural hydrologic regime.

6. Incorporate natural site elements (wetlands, stream corridors, mature forests) as design elements.
 7. Avoid erosive flow conditions in natural flow pathways.
 8. Minimize soil disturbance and soil compaction.
 9. Minimize thermal impacts to Waters of the Commonwealth.
 10. Disconnect impervious surfaces by directing runoff to pervious areas, wherever possible and decentralize and manage stormwater at its source.
6. Impervious Areas:
- (a) 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 stages.
 - (b) For developments taking place in stages, the entire development plan must be used in determining conformance with this Ordinance.
 - (c) For projects that add impervious area to a developed parcel, to the maximum extent practicable and at the discretion of the Municipal Engineer, the total impervious area on the parcel may be subject to the requirements of this Ordinance.
7. If diffused flow is proposed to be concentrated and discharged onto adjacent property, the Applicant must document that adequate downstream conveyance facilities exist to safely transport the concentrated discharge, or otherwise prove that no erosion, sedimentation, flooding or other harm will result from the concentrated discharge.
 - (a) Applicant must provide an executed easement for proposed concentrated flow across adjacent properties to a drainage way or public right-of-way.
 - (b) Such stormwater flows shall be subject to the requirements of this Ordinance.
 8. Stormwater drainage systems shall be provided in order to permit unimpeded flow along natural watercourses, except as modified by stormwater management facilities or open channels consistent with this Ordinance.
 9. Where watercourses traverse a development site, drainage easements (with a minimum total width of 20 feet) shall be provided conforming to the line of such watercourses. The terms of the easement shall prohibit excavation, the placing fill or structures, and any alterations that may adversely affect the flow of stormwater within any portion of the easement. Also, maintenance, including mowing of vegetation within the easement may be required, except as approved by the appropriate governing authority.
 10. When it can be shown that, due to topographic conditions, natural drainageways on the site cannot adequately provide for drainage, open channels may be constructed conforming substantially to the line and grade of such natural drainageways. Work within natural drainageways shall be subject to approval by Pennsylvania DEP under regulations at 25 PA Code Chapter 105 through the Joint Permit Application process, or, where deemed appropriate by Pennsylvania DEP, through the General Permit process.
 11. Any stormwater management facilities or any facilities that constitute water obstructions (e.g., culvert, bridges, outfalls, or stream enclosures, etc.) that are regulated by this Ordinance, that will be located in or adjacent to Waters of the Commonwealth (including wetlands), shall be subject to approval by Pennsylvania DEP under regulations at 25 PA Code Chapter 105 through the Joint Permit Applications

process, or where deemed appropriate by Pennsylvania DEP, the General Permit process. When there is a question whether wetlands may be involved, it is the responsibility of the Applicant or his agent to show that the land in question cannot be classified as wetlands; otherwise, approval to work in the area must be obtained from Pennsylvania DEP.

12. Should any stormwater management facility require a dam safety permit under Pennsylvania DEP Chapter 105, the facility shall be designed in accordance with Chapter 105 and meet the regulations of Chapter 105 concerning dam safety.
13. Any stormwater management facilities regulated by this Ordinance that will be located on, or discharged onto, State highway rights-of-ways shall be subject to approval by the Pennsylvania Department of Transportation (PENNDOT).
14. Minimization of impervious surfaces and infiltration of runoff through seepage beds, infiltration trenches, etc., are encouraged, where soil conditions and geology permit, to reduce the size or eliminate the need for detention facilities.
15. Infiltration BMPs should be dispersed throughout the site, 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.
16. Roof drains shall not be connected to streets, sanitary or storm sewers, or roadside ditches in order to promote overland flow and infiltration/percolation of stormwater where it is advantageous to do so. When it is more advantageous to connect directly to streets or storm sewers, then the Borough of Sugarcreek shall permit it on a case-by-case basis.
17. Applicants are encouraged to use Low Impact Development Practices to reduce the costs of complying with the requirements of this Ordinance and the State Water Quality Requirements.
18. When stormwater management facilities are proposed within 1,000 feet of a downstream municipality, the Developer shall notify the downstream municipality and provide a copy of the SWM Plan, upon request, for review and comment.

B. EXEMPTIONS/MODIFICATIONS

1. Under no circumstance shall the Applicant be exempt from implementing such measures as necessary to:
 - (a) Meet State Water Quality Standards and Requirements.
 - (b) Protect health, safety, and property.
 - (c) Meet special requirements for High Quality (HQ) and Exceptional Value (EV) watersheds.
2. The Applicant must utilize the following BMPs to the maximum extent practicable to receive consideration for the exemptions:
 - (a) Design around and limit disturbance of floodplains, wetlands, natural slopes over 15%, existing native vegetation, and other sensitive and special value features.
 - (b) Maintain riparian and forested buffers.
 - (c) Limit grading and maintain non-erosive flow conditions in natural flow paths.

- (d) Maintain existing tree canopies near impervious areas.
 - (e) Minimize soil disturbance and reclaim disturbed areas with topsoil and vegetation.
 - (f) Direct runoff to pervious areas.
3. The Applicant’s proposed development/additional impervious area may not adversely impact the following:
- (a) Capacities of existing drainageways and storm sewer systems.
 - (b) Velocities and erosion.
 - (c) Quality of runoff if direct discharge is proposed.
 - (d) Existing known problem areas.
 - (e) Safe conveyance of the additional runoff.
 - (f) Downstream property owners.
4. An Applicant proposing Regulated Activities, after demonstrating compliance with Sections III(B)(1) through (3), may be exempted from various requirements of this Ordinance according to the following table:

New Impervious Area ^{1,2} (square footage)	Applicant Must Provide
0 – 1,000	----
1,000 – 2,500	Documentation of Impervious Area ³
2,500 – 5,000	Volume Controls
>5,000	Rate Controls, Volume Controls & SWM Site Plan

NOTES:

1. New Impervious Area since the date of adoption of this Ordinance.
2. Gravel in existing condition shall be considered pervious and gravel in proposed condition shall be considered impervious.
3. The Small Project Stormwater Management Application may be used to projects under 5,000 square feet of proposed impervious surface. The Small Project SWM application allows documentation of new impervious surface, credits through disconnection of impervious surfaces and tree planting, and sizing of Volume Control BMPs that may be required.

5. Single family residential activities are exempt from these requirements provided the construction:
- (a) Complies with Articles III(A)(7), III(B)(2), III(B)(3), and
 - (b) Having building setback 75 feet from downstream property lines, and
 - (c) Driveways:
 - 1 Runoff must discharge onto pervious surface with a gravel strip or other spreading device or provide other sheet flow to pervious areas.
 - 2 No more than 1,000 square feet of pervious surface may discharge to any one point.
 - 3 The length of flow on the pervious must exceed the length of paved surface flow.

- (d) The first page of the Small Project Stormwater Management Application must be provided to document the proposed impervious area.
 - (e) The municipality can require more information or require mitigation of certain impacts through installation of stormwater management BMPs if there is a threat to property, health or safety.
6. An applicant proposing Regulated Activities, after demonstrating compliance with Articles III(B)(1) through (3), may be exempted from various requirements of this Ordinance if documentation can be provided that a downstream manmade water body (i.e., reservoir, lake or manmade wetlands) or SWM BMP have been designed or modified to address the potential stormwater flooding impacts of the proposed development.
 7. The purpose of this section is to ensure consistency of stormwater management planning between local ordinances and NPDES permitting (when required) and to ensure that the Applicant has a single and clear set of stormwater management standards to which the Applicant is subject. The Borough of Sugarcreek may accept alternative stormwater management controls under this section provided that:
 - (a) The alternative controls are documented to be acceptable to Pennsylvania DEP, for NPDES requirements pertaining to post construction stormwater management requirements.
 - (b) The alternative controls are in compliance with all other section of this ordinance, including, but not limited to, Articles III(A)(4) and III(B)(1) through (3).
 8. Agricultural activities are exempt from requirements of this Ordinance provided the activities are performed according to the requirements of 25 PA Code Chapter 102.
 9. Forest management and timber operations are exempt from the Rate and Volume Control requirement and SWM Site Plan preparation requirement of this Ordinance provided the activities are performed according to the requirements of 25 PA Code Chapter 102.

C. VOLUME CONTROLS:

1. The Low Impact Development Practices provided in the BMP Manual shall be utilized for all Regulated Activities to the maximum extent practicable.
2. Stormwater runoff Volume Controls shall be implemented using the Design Storm Method or the Simplified Method as defined below. For Regulated Activities areas greater than one (1) acre, or which require detailed design of stormwater management facilities, the Design Storm Method shall be followed. For Regulated Activity areas equal or less than one (1) acres that do not require hydrologic routing to design the stormwater facilities, this Ordinance established no preference for either method; therefore, the Applicant may select either method 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 sized Regulated Activity. This method requires detailed modeling based on site conditions and shall be completed by a Qualified Professional to include the following elements:
 1. Do not increase the post-development total runoff volume when compared to the pre-development total runoff volume for the 2-year/24-hour storm event.
 2. For hydrologic modeling purposes:

- (i) Existing non-forested pervious areas must be considered meadow (good condition) for pre-development hydrologic calculations.
 - (ii) Twenty (20) percent of existing impervious area, when present within the proposed project site, shall be considered meadow (good condition) for pre-development hydrologic calculations for re-development.
- (b) The Simplified Method (CG-2 in the BMP Manual) is independent of site conditions and should be used if the Design Storm Method is not followed. This method is no applicable to Regulated Activities greater than one (1) acre or for projects that require detailed design of stormwater storage facilities. For proposed 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 proposed impervious surfaces shall be permanently removed from the runoff flow, i.e. it shall not be released into surface Waters of the Commonwealth. Removal options include reuse, evaporations, 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 one-half (0.5) inch of the permanently removed runoff should be infiltrated.
 - 4. Actual field infiltration tests at the location of the proposed elevation of the stormwater BMPs are required. Infiltration test shall be conducted in accordance with the BMP Manual. A minimum 48-hour notification to the Borough of Sugarcreek shall be provided to allow witnessing of the testing.
- (c) In cases where it is not possible or desirable to use the infiltration-based best management practices to partially fulfill the requirements in either Article III(C)(2)(A) or Article III(C)(2)(B), the following procedure shall be performed and documented by a Qualified Professional:
 - 1. At a minimum, the following documentation shall be provided to justify the decision to not use infiltration BMPs:
 - (i) Description of and justification for field infiltration/permeability testing with respect to the type of test and test locations.
 - (ii) An interpretive narrative describing existing site soils and their structure as these relate to the interaction between soils and water occurring on the site. In addition to providing soil and soil profile descriptions, this narrative shall identify depth to seasonal high water tables and depth to bedrock, and provide a description of all subsurface elements (fragipans and other restrictive layers, geology, etc.) that influence the direction and rater of subsurface water movement.
 - (iii) A qualitative assessment of the site's contribution to annual aquifer recharge shall be made, along with identification of any restrictions or limitations associated with the use of engineered infiltration facilities.
 - (iv) The provided documentation must be signed and sealed by the Qualified Professional.

2. The following water quality pollutant load reductions will be required for all disturbed areas within the proposed development:

Pollutant Load	Units	Required reduction (%)
Total Suspended Solids (TSS)	Pounds	85
Total Phosphorous (TP)	Pounds	85
Total Nitrate (NO3)	Pounds	50

3. The performance criteria for water quality best management practices shall be determined from the BMP Manual.

3. The applicable worksheets from the BMP Manual must be used in calculations to establish Volume Control.

D. RATE CONTROLS:

1. For lands contained within Venango County that have not had release rates established under an approved Act 167 Stormwater Management Plan:
 - (a) Post-development discharge rates shall not exceed the pre-development discharge rates for the 1-year, 2-year, 10-year, 25-year, 50-year, and 100-year storms.
2. For lands contained within Venango County that have had release rates established under an approved Act 167 Stormwater Management Plan:
 - (a) The post-development peak discharge rates shall be in accordance with the approved release rate map for the individual watershed.

ARTICLE IV
EROSION AND SEDIMENTATION STANDARDS

A. EROSION AND SEDIMENTATION REQUIREMENTS DURING EARTH DISTURBANCE ACTIVITIES:

1. The applicant shall meet requirements as contained in 25 PA Code, Chapters 92 and 102 as required and applicable as follows:
 - (a) The implementation and maintenance of erosion and sediment control BMPs.
 - (b) Development of written plans.
 - (c) Submission of plans for approval.
 - (d) Obtaining Erosion and Sediment Control and NPDES permits.
 - (e) Maintaining plans and permits on site.
2. Evidence of any necessary plan or permit approval for Earth Disturbance activities from Pennsylvania DEP or the Venango Conservation District must be provided to the Borough of Sugarcreek.
3. A copy of the approved Erosion and Sediment Control Plan and any other permit, as required by Pennsylvania DEP or the Venango Conservation District, shall be available at the project site at all times if required under PA 25 Code, Chapter 102.
4. Construction of temporary roadways (e.g., for utility construction, timber harvesting, etc.) shall comply with all applicable standards for erosion and sedimentation control and stream crossing regulations under 25 PA Code, Chapters 102 and 105. The Erosion and Sediment Control Plan shall be designed, implemented, and maintained, and shall address the following, as applicable:
 - (a) Design of the roadway system, including haul roads, skid roads, landing areas, trails, and storage and staging areas.
 - (b) Runoff control structures (e.g., diversions, culverts, detention ponds, etc.).
 - (c) Stream crossings for both perennial and intermittent streams.
 - (d) Access to public roadways, including design of rock construction entrance for mud and debris control.
 - (e) A remediation plan for restoring the disturbed area through re-grading, topsoil placement, reseeding, and other stabilization techniques, as required.
5. Additional erosion and sedimentation control design standards and criteria that must be applied where infiltration BMPs are proposed include the following:
 - (a) Areas proposed for infiltration BMPs shall be protected from sedimentation and compaction during the constructions phase, as to maintain their maximum infiltration capacity.
 - (b) Infiltration BMPs shall be protected from receiving sediment-laden runoff.
 - (c) The source of protection for infiltration BMPs shall be identified (i.e., orange construction fence surrounding the perimeter of the BMP).

ARTICLE V
PROTECTED WATERSHED STANDARDS

A. PROTECTED WATERSHED STANDARDS:

1. For any Regulated Activity other than one (1) single family residence within a protected watershed (High Quality or Exceptional Value), the applicant shall meet requirements as contained in 25 PA Code, Chapter 93 as required and applicable. It is noted that special protections watersheds are areas where Pennsylvania DEP reviews PCSM plans for NPDES permitting.
2. Existing Resources and Site Analysis Plan. A written and graphic plan shall be prepared to provide the developer and the Borough of Sugarcreek with a comprehensive analysis of existing conditions, both on the proposed development site and within five hundred (500) feet of the site. Conditions beyond the parcel boundaries may be described on the basis of existing published data available from governmental agencies and from aerial photographs. The Borough of Sugarcreek shall review the plan to assess its accuracy, conformance with borough ordinances, and likely impact upon the natural and cultural resources on the property. The following information shall be required:
 - (a) Complete current perimeter boundary survey of the property to be subdivided or developed prepared by a registered surveyor, showing all courses, distances and area and tie-ins to all adjacent intersections.
 - (b) A vertical aerial photograph enlarged to a scale not less detailed than one (1) inch equals 400 feet, with the site boundaries clearly marked.
 - (c) Natural features, including:
 - (1) Contour lines at intervals of not more than two (2) feet. (Ten-foot intervals are permissible beyond the parcel boundaries, interpolated for USGS published maps). Contour lines shall be based on information derived from a topographic survey for the property, evidence of which shall be submitted, including that date and source of the contours. Data to which contour elevations shall be included on the plan.
 - (2) Steep slopes in the following ranges: 15% to 25%, 25% and greater. The location of these slopes shall be graphically depicted by category on the plan. Slope shall be measured over three or more two-foot contour intervals.
 - (3) Areas within the floodway, flood fringe, and approximated floodplain.
 - (4) Watercourses, either continuous or intermittent and named or unnamed, and lakes, ponds or other water features as depicted on the USGS Quadrangle Maps, most current edition.
 - (5) Wetlands and wetland margins.
 - (6) Riparian buffers.
 - (7) Soil types and their boundaries, as mapped by the USDA Natural Resource Conservation Service, including a table listing the soil characteristics pertaining to suitability for construction and, in unsewered areas, for septic suitability. Alluvial and hydric soils shall specifically be depicted on the plan.
 - (8) Existing vegetation, denoted by type, including woodlands, hedgerows, tree masses, tree lines, individual freestanding trees over six (6) inches diameter at breast height,

wetland vegetation, pasture or croplands, orchards, permanent grass land, old fields, and any other notable vegetative features on the site. Vegetative types shall be described by plant community, relative age, and condition.

- (9) Any identified Pennsylvania Natural Diversity Inventory (PNDI) site conflicts.
 - (10) Geologic formations on the tract, including rock outcroppings, cliffs, sinkholes, and fault lines based on available published information or more detailed data obtained by the applicant.
- (d) Existing man-made features, including:
- (1) Location, dimensions, and use of existing buildings and driveways.
 - (2) Location, names, widths, center line courses, paving widths, identification numbers, and rights-of-way, of existing streets and alleys.
 - (3) Location of trails that have been in public use (pedestrian, equestrian, bicycle, etc.)
 - (4) Location and size of existing sanitary sewage facilities.
 - (5) Location and size of drainage facilities.
 - (6) Location of water supply facilities, including wellhead protection areas.
 - (7) Any easement, deed restrictions, rights-of-way, or any other encumbrances upon the land, including location, size and ownership.
 - (8) Site features or conditions such as hazardous waste, dumps, underground tanks, active and abandoned wells, quarries, landfills, sand mounds, and artificial land conditions.
- (e) Total acreage of the tract, the adjusted tract area, where applicable, and the constrained land area with detailed supporting calculations.
3. Stormwater Management System Concept Plan. A written and graphic concept plan of the proposed post-development stormwater management system shall be prepared and include:
- (a) Preliminary selection and location of proposed structural stormwater controls;
 - (b) Location of existing and proposed conveyance systems such as grass channels, swales, and storm drains;
 - (c) Location of floodplain/floodway limits;
 - (d) Relationship of site to upstream and downstream properties and drainages;
 - (e) Preliminary location of proposed stream channel modifications, such as bridge or culver crossings.
4. Consultation Meeting. Prior to any stormwater management permit application submission, the landowner or developer shall meet with the Borough of Sugar Creek for a consultation meeting on a concept plan for the post-development stormwater management system to be utilized in the preliminary plan or other early step in the development process. The purpose of this meeting is to discuss the post-development stormwater management measures necessary for the proposed project, as well as to discuss and assess constraints, opportunities and potential ideas for stormwater management designs before the formal site design engineering is commenced.

5. All proposed Regulated Activities within a protected watershed shall utilize, to the maximum extent possible, Low Impact Development Practices.

6. The SWM Plan and Report shall address the following:

- (a) Design using nonstructural BMPs
 - (1) Lot configuration and clustering.
 - (i) Reduced individual lot impacts by concentrated/clustered uses and lots
 - (ii) Lots/development configured to avoid critical natural areas
 - (iii) Lots/development configured to take advantage of effective mitigative stormwater practices
 - (iv) Lots/development configured to fit natural topography
 - (2) Minimum disturbance
 - (i) Define disturbance zones (excavation/grading) for the site and individual lots to protect maximum total site area from disturbance
 - (ii) Barriers/flagging proposed to protect designated non-disturbance areas
 - (iii) Considered mitigative practices for minimal disturbance areas (e.g., Soil Restoration)
 - (iv) Considered re-forestation and re-vegetation opportunities
 - (3) Reduce Impervious coverage
 - (i) Reduced road width
 - (ii) Reduced driveway lengths and widths
 - (iii) Reduced parking ratios and sizes
 - (iv) Utilized porous surfaces for applicable features
 - (4) Stormwater disconnected from impervious area
 - (i) Disconnected drives/walkways/small impervious areas to natural areas
 - (ii) Use rain barrels and/or cisterns for lot irrigation
 - (5) Apply structural BMP selection process that meets runoff quantity and quality needs.
 - (i) Manage close to source with collection with conveyance minimized
 - (ii) Consistent with site factors (e.g., soils, slope, available space, amount of sensitive areas, pollutant removal needs)
 - (iii) Minimize footprint and integrate into already disturbed areas/other buildings program components (e.g., recharge beneath parking areas, vegetated roofs)
 - (iv) Consider other benefits such as aesthetic, habitat, recreational and educational benefits
 - (v) BMP selected based on maintenance needs that fit owner/users
 - (6) BMP sustainable using a long-term maintenance plan.

ARTICLE VI
RIPARIAN BUFFER STANDARDS

A. RIPARIAN BUFFER REQUIREMENTS:

Riparian buffers are required for Regulated Activity and shall be established as follows:

1. The buffer shall be measured perpendicularly from the top of the stream bank landward:
 - (a) High Quality or Exceptional Value Watersheds – a minimum of 150 feet;
 - (b) Impaired Watersheds – a minimum of 150 feet;
 - (c) All other watersheds – a minimum of 50 feet; or
 - (d) As determined by a stream corridor study approved by Pennsylvania DEP and the Borough of Sugarcreek.
2. The riparian buffer shall be located on both sides of all perennial and intermittent streams. The perennial and intermittent streams and the riparian buffer boundaries shall be shown on all applications for building permits, subdivision, or land development. Existing uses within the buffer are permitted to continue, but not be expanded. Placement of new buildings or roadways within the riparian buffer shall be prohibited, unless specifically permitted by Pennsylvania DEP. Where a wetland exists within the buffer area, the buffer shall be extended landward to provide a minimum buffer of 25-foot, as measured perpendicularly from the wetland boundary.
3. The buffer shall be undisturbed forest consisting of appropriate native species.
4. Where wetlands are located partially or entirely within a buffer, the buffer shall be extended to encompass the wetland and shall be widened by a distance sufficient to provide a 25-foot forested buffer measured perpendicularly from the wetland boundary.
5. The following uses shall be permitted in the buffer:
 - (a) Footpaths, trails and bike patch provided that:
 - (1) Width is limited to five (5) feet;
 - (2) Width may be increased provided a corresponding increase in the buffer is provided;
 - (3) Construction shall have minimal impact to the buffer.
 - (b) Stream crossings, provided the crossing is designed and constructed in such a manner as to minimize the impact to the buffer. The riparian buffer shall be restored to its original condition, to the maximum extent practical, upon completion of construction.
 - (c) Utility lines, provided that the crossing is designed and constructed in such a manner as to minimize the impact to the inner buffer and provided that there is no practical alternative to locating the utility line within the buffer. The riparian buffer shall be restored to its original condition, to the maximum extent practical, upon completion of construction.
 - (d) Maintenance and restoration of the riparian buffer.

- (e) Projects conducted with the objective of improvement, stabilization, restoration, or enhancement of the stream bank, stream channel, floodplain, watershed, hydrology, riparian buffers, or aquatic habitat and maintenance activities associated with such projects. These projects include, but are not limited to, agricultural and stormwater management BMPs. Such projects must receive appropriate permits and approvals from Pennsylvania DEP prior to starting the project.
 - (f) Minor private recreational uses for the property owner. Such uses include benches, fire rings and similar uses. Such uses do not include structures such as cabins, sheds, pavilions, garages, dwellings or similar structures.
- 6. Disturbance of the riparian buffer shall be limited to the area necessary to perform an allowable use.
- 7. Where possible and practical, disturbances shall be phased with each phase restored prior to beginning the next phase.
- 8. Allowable activities shall not cause stormwater flow to concentrate.
- 9. Any vegetation removed for an allowable activity shall be replaced immediately upon completion of the activity. Where mature trees are removed, such trees shall be replaced with the largest practical tree of acceptable native species.
- 10. Erosion and sediment pollution control shall be installed and maintained during construction. Evidence of an approved Erosion and Sediment Control Plan and/or NPDES Permit, if required, shall be submitted prior to issuance of local permits.
- 11. If a permit from Pennsylvania DEP is required for the activity, evidence of an approved permit shall be submitted prior to issuance of local permits.
- 12. Riparian buffers shall be maintained in a manner consistent with sound forest management practices. In the absence of a site management plan, the following maintenance guidelines apply:
 - (a) Buffers shall be inspected periodically for evidence of excessive sediment deposition, erosion or concentrated flow channels. Prompt action shall be taken to correct these problems and prevent future occurrence.
 - (b) Trees presenting an unusual hazard of creating downstream obstructions shall be removed. Such material shall be removed from the floodplain or the riparian buffer (whichever is widest), or cut into sections small enough so as to prevent the possibility of creating obstructions downstream. Wherever possible, large stable debris should be conserved.
 - (c) Vegetation should be inspected periodically to ensure diverse vegetative cover and vigorous plant growth consistent with buffering objectives.
 - (1) Invasive plant species that may threaten the integrity of the buffer shall be removed.
 - (2) Periodic cutting of trees may be necessary to promote vigorous growth and encourage regeneration.
 - (d) Excessive use of fertilizers, pesticides, herbicides, and other chemicals shall be avoided. These products should be used only when absolutely necessary to maintain buffer vegetation.

B. RIPARIAN BUFFER EASEMENT:

For all riparian buffers, an easement shall be provided:

1. Easements shall be in accordance with Article IX(A) and recorded in accordance with Section XIII(C) of this Ordinance.

**ARTICLE VII
DESIGN CRITERIA**

A. DESIGN CRITERIA FOR STORMWATER MANAGEMENT FACILITIES; CALCULATION METHODOLOGY:

General design guidelines for all stormwater management, drainage, stormwater carrying and swale conveyance facilities, as well as the calculation methodology for such facilities, shall comply with the BMP Manual most current edition, and the Venango County Stormwater Management Plan.

ARTICLE VIII
SWM SITE PLAN AND REPORT REQUIREMENTS

A. GENERAL REQUIREMENTS:

For any activities regulated by this Ordinance and not eligible for exemptions provided in Article III, the final approval of subdivision and/or land development plans, the issuance of any building or occupancy permit, or the commencement of any land disturbance activity, may not proceed until the Applicant has received written approval of a SWM Site Plan for the Borough of Sugarcreek.

B. SWM SITE PLAN AND REPORT CONTENTS:

The SWM Site Plan and SWM Site Report shall consist of all applicable calculations, maps, and plans. All SWM Site Plan materials shall be submitted to the Borough of Sugarcreek in a format that is clear, concise, legible, neat and well organized; otherwise, the SWM Site Plan shall be rejected. Appropriate sections from the Borough of Sugarcreek Subdivision and Land Development Ordinance, and other applicable local ordinances, shall be followed in preparing the SWM Site Plan.

1. SWM Site Plan shall include, but not be limited to:
 - (a) Plans shall be one (1) size and in a size that meets the requirements for recording in the Office of the Recorder of Deeds of Venango County.
 - (1) Plans for tracts of less than 20 acres shall be drawn at a scale of one (1) inch equals no more than 50 feet;
 - (2) Plans for tracts of 20 acres or more shall be drawn at a scale of one (1) inch equals no more than 100 feet; and
 - (3) All lettering shall be drawn to a size to be legible if the plans are reduced to half size.
 - (b) The name of the development; name and location address of the property site; name, and telephone number of the Applicant and Owner of the property; and name, address, telephone number, email address, and seal and signature of the individual preparing the SWM Site Plan.
 - (c) The date of submission and dates of all revisions.
 - (d) A graphical and written scale on all drawings and maps.
 - (e) A north arrow on all drawings and maps.
 - (f) A location map at a minimum scale of one (1) inch equals 1,000 feet and illustrates the project relative to highways, municipalities or other identifiable landmarks.
 - (g) Metes and bounds description of the entire tract perimeter.
 - (h) Existing and final contours at intervals:
 - (1) Slopes less than 5%: no greater than one (1) foot;
 - (2) Slopes between 5 and 15%: no greater than two (2) feet;
 - (3) Steep slopes (greater than 15%), 5-foot contour intervals may be used.
 - (i) Perimeters of existing waterbodies within the project area including stream banks, lakes, ponds, springs, field delineated wetlands or other bodies of water, sinkholes, flood hazard boundaries

(FEMA delineated floodplains and floodways), areas of natural vegetation to be preserved, the total extent of the upstream area draining through the site, and overland drainage paths. Any areas necessary to determine downstream impacts, where required for proposed stormwater management facilities, must be shown.

- (j) The location of all existing and proposed utilities, on-lot wastewater facilities, water supply wells, sanitary sewers, and water lines on and within fifty (50) feet of property line including inlets, manholes, valves, meters, poles, chambers, junction boxes, and other utility system components.
- (k) A key map showing all existing manmade features beyond the property boundary that may be affected by the project.
- (l) Soil names and boundaries with identification of the Hydraulic Soil Group classification including rock outcroppings.
- (m) Proposed impervious surfaces (structures, roads, paved areas, and buildings), including plans and profiles of roads and paved areas and floor evaluations of buildings.
- (n) Existing and proposed land use(s).
- (o) Horizontal alignment, vertical profiles, and cross sections of all open channels, pipes, swales and other BMPs.
- (p) The location and clear identification of the nature of permanent stormwater BMPs.
- (q) The location of all erosion and sedimentation control facilities, shown on a separate E&S Plan.
- (r) A minimum twenty (20) foot wide access easement around all stormwater management facilities that would provide ingress to and egress from a public right-of-way. In lieu of providing an easement to the public right-of-way, a note may be added to the plan granting the Borough of Sugarcreek or their designees access to all easements via the nearest public right-of-way.
- (s) Construction details for all drainage and stormwater BMPs.
- (t) Identification of short-term and long-term ownership, operations and maintenance responsibilities.
- (u) Notes and Statements:
 - (1) A statement, signed by the landowner, acknowledging that the stormwater BMPs are fixtures that cannot be altered or removed without prior approval by the Borough of Sugarcreek.
 - (2) A statement referencing the Operation of Maintenance (O&M) Agreement and stating that the O&M Agreement is part of the SWM Site Plan.
 - (3) A not indicating that Record Drawings will be provided for all stormwater facilities prior to occupancy, or the release of the surety bond.
 - (4) The following signature block for the Qualified Professional preparing the Stormwater Management Plan:

“I, _____, hereby certify that the Stormwater Management Plan meets all design standards and criteria of the Stormwater Management Ordinance of the Borough of Sugarcreek.”

- (5) The following signature block for the Municipal Engineer reviewing the Stormwater Management Plan:

“I, _____, have reviewed this Stormwater Management Plan in accordance with the Design Standards and Criteria of the Stormwater Management Ordinance of the Borough of Sugarcreek.”

2. SWM Site Report shall include (but not be limited to):

(a) General data including:

- (1) Project name;
- (2) Project location – address of the property site;
- (3) Name, address, and telephone number of the Applicant and Owner of the property;
- (4) Name, address, telephone number, email address, and seal and signature of the individual preparing the SWM Site Report;
- (5) Date of submission and revisions.

(b) Project description narrative that clearly discusses the project and provides the following information:

(1) Narrative

- Statement of the regulated activity describing what is being proposed. Overall stormwater management concept with description of permanent stormwater management techniques, including construction specifications and materials to be used for stormwater management facilities
- Expected project schedule
- Location map showing the project site and its location relative to release rate districts
- Detailed description of the existing site conditions including a site evaluation completed for projects proposed in areas of carbonate geology or karst topography, and other environmentally sensitive areas such as brownfields
- Total size area – pre and post, which must be equal or have an explanation as to why it is not
- Total site impervious area
- Total off-site areas
- Number and description of stormwater management facilities
- Type of development
- Pre-development land use

- Whether site is a water quality sensitive (WQS) development
- Whether site is in a defined sensitive area
- Types of water quality and recharge systems used, if applicable
- Complete hydrologic, hydraulic, and structural computations for all stormwater management facilities
- A written maintenance plan for all stormwater features including detention facilities and other stormwater management elements.
- Identification of ownership and maintenance responsibility for all permanent stormwater management facilities
- Other pertinent information, as required

(2) Summary Tables

- Pre-development Hydrologic Soil Group (HGS) assumptions, curve numbers (CN), Computation of average slope, hydraulic length, computed time of concentration
- Existing conditions runoff volume and peak rate of runoff
- Post-development runoff volume and peak rate of runoff
- Undetained areas, areas to ponds
- Land use for each subarea
- Hydrologic soil group (HSG) assumptions, curve numbers (CN)
- Time of concentration computed for each subarea
- Post-development peak of runoff routed into and out of ponds
- Pond maximum return period design data including: maximum water surface elevation, berm elevation, and emergency spillway elevation
- Water quality depth and volume requirements

(3) Calculations

- Complete hydrologic, hydraulic and structural computations, calculations, assumptions, and criteria for the design of all stormwater BMPs.
- Details of the berm embankment and outlet structure indicating the embankment top elevation, embankment side slopes, top width of embankment, emergency spillway elevation, perforated riser dimensions, pipe barrel dimensions and dimensions and spacing of antiseep collars.
- Design computations for the control structures (pipe barrel and riser, etc)
- A plot or table of the stage-storage (volumes vs elevation) and all supporting computations.
- Routing computations.

(4) Drawings

- Drainage area maps for all watersheds and inlets depicting the time of concentration path for both existing conditions and post-developed condition.

- All stormwater management facilities must be located on a plan and described in detail including easements and buffer boundaries.

- (c) Reports that do not clearly indicate the above information may be rejected for review by the Municipal Engineer and will be returned to the Applicant.
- (d) Description of, justification, and actual field results for infiltration testing with respect to the type of test and test location for the design of infiltration BMPs.
- (e) 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 municipal stormwater collection system that may receive runoff from the project site.
- (f) Description of the proposed changes to the land surface and vegetative cover including the type and amount of impervious area to be added.
- (g) Identification of short-term and long-term ownership, operation, and maintenance responsibilities as well as schedules and costs for inspection and maintenance activities for each permanent stormwater or drainage BMP, including provisions for permanent access or maintenance easements.

3. Supplemental information to be provided prior to recording of the SWM Site Plan, as applicable:

- (a) Signed and executed Operations and Maintenance Agreement.
- (b) Signed and executed easements, as required for all on-site and off-site work.
- (c) An Erosion and Sedimentation Control Plan and approval letter from the Venango Conservation District.
- (d) A NPDES Permit.
- (e) Permits from Pennsylvania DEP and U.S. Army Corps of Engineers.
- (f) Geologic assessment.
- (g) Geotechnical or soils investigation report, including boring logs, compaction requirements, and recommendations for construction of detention basins.
- (h) A Highway Occupancy Permit for PENNDOT when utilization of a PENNDOT storm drainage system is proposed or when proposed facilities would encroach onto a PENNDOT right-of-way.

C. SWM SITE PLAN AND REPORT SUBMISSION:

- 1. The Applicant shall submit the SWM Site Plan and Report for the Regulated Activity.
- 2. Five (5) copies of the SWM Site Plan and Report shall be submitted and be distributed as follows:
 - (a) Two (2) copies to the Borough of Sugarcreek accompanied by the requisite executed Review Fee Reimbursement Agreement, as specified in this Ordinance.

- (b) One (1) copy to the Municipal Engineer
 - (c) One (1) copy to the Venango County Planning Commission
 - (d) One (1) copy to the Venango County Conservation District
3. Additional copies shall be submitted as requested by the Borough of Sugarcreek of Pennsylvania DEP.

D. SWM SITE PLAN AND REPORT REVIEW:

1. The Borough of Sugarcreek shall require receipt of a complete SWM Site Plan and Report as specified in this Ordinance. The Borough of Sugarcreek shall review the SWM Site Plan and Report for consistency with the purposes, requirements, and intent of this Ordinance.
2. The Borough of Sugarcreek shall not approve any SWM Site Plan and Report 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 and Report is found to be deficient, the Borough of Sugarcreek may disapprove the submission and require a resubmission.
3. The Borough of Sugarcreek shall notify the Applicant in writing within forty-five (45) calendar days whether the SWM Site Plan and Report is approved or disapproved if the SWM Site Plan and Report is not part of a Subdivision or Land Development Plan. If the SWM Site Plan and Report involves a Subdivision or Land Development Plan, the timing shall follow the subdivision and land development process according to the Municipalities Planning Code and the Borough of Sugarcreek Subdivision and Land Development Ordinance.
4. The Borough of Sugarcreek shall not issue a building permit for any Regulated Activity if the SWM Site Plan and Report has been found to be inconsistent with this Ordinance, as determined by the Borough of Sugarcreek. All required permits from Pennsylvania DEP must be obtained prior to issuance of a building permit.

E. MODIFICATION OF PLANS:

A modification to a submitted SWM Site Plan and Report for a development site that involves a change in stormwater management facilities or techniques, or that involves the relocation or re-design of stormwater management facilities, or that is necessary because soil or other conditions are not as stated on the SWM Site Plan as determined by the Borough of Sugarcreek, shall require a resubmission of the modified SWM Site Plan in accordance with this Ordinance.

F. RESUBMISSION OF DISAPPROVED SWM SITE PLAN AND REPORT:

A disapproved SWM Site Plan and Report may be resubmitted with the revisions addressing the Borough of Sugarcreek's concerns documented in writing, to the Borough of Sugarcreek in accordance with this Ordinance. The applicable fee must accompany a resubmission of a disapproved SWM Site Plan and Report.

G. AUTHORIZATION TO CONSTRUCT AND TERM OF VALIDITY:

The Borough of Sugarcreek's approval of a SWM Site Plan and Report authorizes the Regulated Activities contained in the SWM Site Plan for a maximum term validity of five (5) years following the date of approval. The Borough of Sugarcreek may specify a term of validity shorter than five (5) years in the approval for any specific SWM Site Plan. Terms of validity shall commence on the date the Borough of Sugarcreek signs the approval for a SWM Site Plan. If stormwater management facilities included in the approved SWM Site Plan have not been constructed, or if a Record Drawing of these facilities has not been approved, within this time, then the Borough of Sugarcreek may consider the SWM Site Plan disapproved and may revoke any and all permits or approvals.

H. RECORD DRAWINGS, COMPLETION CERTIFICATE AND FINAL INSPECTION:

1. The Applicant shall be responsible for providing Record Drawings of all stormwater BMPs included in the approved SWM Site Plan. The Record Drawing and an explanation of any discrepancies with the approved SWM Site Plan shall be submitted to the Borough of Sugarcreek as a prerequisite for the release of the guarantee or issuance of an occupancy permit.
2. The Record Drawing shall include a certification of completion signed by a Qualified Professional verifying that all permanent stormwater BMPs have been constructed according to the approved SMW Site Plan and Report.
 - (a) Drawings shall show all approved revisions and elevations and inverts to all manholes, inlets, pipe, and stormwater control facilities.
3. After receipt of the Record Drawing, the Borough of Sugarcreek may conduct a final inspection prior to certification of completion by the Borough of Sugarcreek.

**ARTICLE IX
EASEMENTS**

A. EASEMENTS:

1. Easements shall be established to accommodate drainageways.
2. Where a tract is traversed by a watercourse, drainage way, channel or stream, there shall be provided an easement paralleling the line of such watercourse, drainage way, channel or stream with a width adequate to preserve the unimpeded flow of natural drainage in the 100-year floodplain.
3. Easements shall be established for all on-site stormwater management or drainage facilities, including, but not limited to, detention facilities (above or below ground), infiltration facilities, all stormwater BMPs, drainage swales, and drainage facilities (inlets, manholes, pipes, etc.).
4. Easements are required for all areas used for off-site stormwater control.
5. All easements shall be a minimum of 20 feet wide and shall encompass the 100-year surface elevation of the proposed stormwater facility.
6. Easements shall provide ingress and egress to a public right-of-way. In lieu of providing an easement to the public right-of-way, a note may be added to the plan granting the Borough of Sugarcreek or its designees access to all easements via the nearest public right-of-way able for vehicle ingress and egress on grades of less than 10% for carrying out inspection or maintenance activities.
7. Where possible, easements shall be centered on side and/or rear lot lines.
8. Nothing shall be planted or placed within the easement which would adversely affect the function of the easement, or conflict with any conditions associated with such easement.
9. All easement agreements shall be recorded and references on the site plan. The format and content of the easement agreement shall be reviewed and approved by the Municipal Engineer and Solicitor.

**ARTICLE X
MAINTENANCE RESPONSIBILITIES**

A. FINANCIAL GUARANTEE:

1. The Applicant shall provide a Financial Guarantee to the Borough of Sugarcreek for the timely installation and proper construction of all stormwater management controls as required by the approved SWM Site Plan and this Ordinance, equal to 110% of the full construction cost of the required controls in accordance with the Municipalities Planning Code.
2. At the completion of the project and as a prerequisite for the release of the Financial Guarantee, the Applicant shall:
 - (a) Provide a certification of completion from an engineer, architect, surveyor or other Qualified Professional, verifying that all permanent facilities have been constructed according to the SWM Site Plan and Report and approved revisions thereto/
 - (b) Provide a set of Record Drawings.
 - (c) Request a final inspection from the Borough of Sugarcreek to certify compliance with this Ordinance, after receipt of the certification of completion and Record Drawings by the Borough of Sugarcreek.

B. MAINTENANCE RESPONSIBILITIES:

1. The SWM Site Plan and Report for the project site shall describe the future operation and maintenance responsibilities. The description shall outline required routine maintenance actions and schedules necessary to ensure proper operation of the stormwater control facilities.
2. The SWM Site Plan and Report for the project site shall establish responsibilities for the continuing operating and maintenance of all proposed stormwater control facilities, consistent with the following principals:
 - (a) If a development consists of structures or lots that are to be separately owned and in which streets, sewers, and other public improvements are to be dedicated to the Borough of Sugarcreek, stormwater control facilities/BMPs may also be dedicated to and maintained by the Borough of Sugarcreek.
 - (b) If a development site is to be maintained in a single ownership or if sewers and other public improvements are to be privately owned and maintained, then the ownership and maintenance of stormwater control facilities/BMPs shall be the responsibility of the owner or private management entity.
 - (c) Facilities, areas, or structures used as stormwater BMPs shall be enumerated as permanent real estate appurtenances and recorded as deed restrictions or easements that run with the land.
 - (d) The SWM Site Plan and Report shall be recorded as a restrictive deed covenant that runs with the land.
 - (e) The Borough of Sugarcreek may take enforcement actions against an Applicant for failure to satisfy any provision of this Ordinance.

3. The Borough of Sugarcreek, upon recommendation of the Municipal Engineer, shall make the final determination of the continuing maintenance responsibilities prior to final approval of the SWM Site Plan and Report. The Borough of Sugarcreek 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 Borough of Sugarcreek will accept the facilities. The Borough of Sugarcreek reserves the right to accept or reject the ownership and operating responsibilities for any portion of the stormwater management controls.
4. If the Borough of Sugarcreek accepts ownership of stormwater BMPs, the Borough of Sugarcreek may, at its discretion, require a fee from the Applicant to the Borough of Sugarcreek to offset the future cost of inspections, operations, and maintenance.
5. It shall be unlawful to alter or remove any permanent stormwater BMP required by an approved SWM Site Plan, or to allow the property to remain in a condition, which does not conform to an approved SWM Site Plan, unless the Borough of Sugarcreek grants an exception in writing.

C. MAINTENANCE AGREEMENT FOR PRIVATELY OWNED STORMWATER FACILITIES:

1. Prior to final approval of the SWM Site Plan and Report, the Applicant shall sign the Operation and Maintenance (O&M) Agreement covering all stormwater control facilities that are to be privately owned. The Operation and Maintenance (O&M) Agreement shall be recorded with the SWM Site Plan and made a part thereof.
 - (a) Municipalities are exempt from the requirement to sign and record an Operation and Maintenance (O&M) Agreement.
2. Other items may be included in the Operation and Maintenance (O&M) Agreement where determined necessary to guarantee the satisfactory operation and maintenance of all BMP facilities. The Operation and Maintenance (O&M) Agreement shall be subject to the review and approval of the Municipal Engineer and the Solicitor.
3. The owner is responsible for operation and maintenance of the stormwater BMPs. If the owner fails to adhere to the Operation and Maintenance (O&M) Agreement, the Borough of Sugarcreek may perform the services required and charge the owner appropriate fees. Non-payment of fees may result in a lien against the property.

**ARTICLE XI
INSPECTIONS**

A. SCHEDULE OF INSPECTIONS:

1. Pennsylvania DEP or its designees inspect for compliances with NPDES permits on sites where applicable. In addition to Pennsylvania DEP compliance programs, the Borough of Sugarcreek or its designee may inspect all phases of the installation of temporary or permanent stormwater management facilities.
2. During any state of Earth Disturbance Activities, if the Borough of Sugarcreek determines that the stormwater management facilities are not being installed in accordance with the approved SWM Site Plan, the Borough of Sugarcreek shall revoke any existing permits or approvals until a revised SWM Site Plan is submitted and approved as specified in this Ordinance.
3. Stormwater BMPs shall be inspected by the landowner, or the landowner's designee, according to the inspection schedule described on the SWM Site Plan for each BMP.
 - (a) The Borough of Sugarcreek may require copies of the inspection reports, in a form as stipulated by the Borough of Sugarcreek.
 - (b) If inspections are not conducted or inspection reports are not submitted as scheduled, the Borough of Sugarcreek or its designee may conduct such inspections and charge the owner appropriate fees. Non-payment of fees may result in a lien against the property.
 - (1) Prior to conducting inspections, the Borough of Sugarcreek shall inform the owner of its intent to conduct an inspection. The owner shall be given thirty (30) days to make the required inspections and submit inspection reports to the Borough of Sugarcreek.

B. RIGHT-OF-ENTRY:

1. Duly authorized representatives of the Borough of Sugarcreek may enter at reasonable times, upon any property within the Borough of Sugarcreek, to inspect the implementation, condition, or operations and maintenance of the stormwater BMPs in regard to any aspect governed by this Ordinance.
2. Stormwater BMP owners and operators shall allow persons working on behalf of the Borough of Sugarcreek ready access to all parts of the premises for the purposes of determining compliance with this Ordinance.
3. Persons working on behalf of the Borough of Sugarcreek shall have the right to temporarily locate on any stormwater BMP in the Borough of Sugarcreek such devices, as are necessary, to conduct monitoring and/or sampling of the discharges from such stormwater BMP.
4. Unreasonable delay in allowing the Borough of Sugarcreek access to a stormwater BMP is a violation of this Ordinance.

**ARTICLE XII
PROHIBITIONS**

A. PROHIBITED DISCHARGES AND CONNECTIONS:

1. Any drain or conveyance, whether on the surface or underground, that allows any non-stormwater discharge, including sewage, process wastewater, and wash water, to enter the Borough of Sugarcreek's separate storm sewer system or Waters of the Commonwealth is prohibited.
2. Any drain or conveyance connected from a commercial or industrial land use to the Borough of Sugarcreek's separate storm sewer system, which has not been documented in plans, maps, or equivalent records, and approved by the Borough of Sugarcreek is prohibited.
3. No person shall allow, or cause to allow, discharges into the Borough of Sugarcreek's separate storm sewer system or into surface Waters of the Commonwealth, which are not composed entirely of stormwater, except those in Article XII(A)(4) below, and discharge allowed under a state or federal permit.
4. The following discharges are authorized unless they are determined to be significant contributors to pollution to the Waters of the Commonwealth:
 - (a) Potable water sources including dechlorinated water line and fire hydrant flushings
 - (b) Irrigation drainage
 - (c) Air conditioning condensate
 - (d) Springs
 - (e) Water from crawl space pumps
 - (f) 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
 - (g) Discharges from firefighting activities
 - (h) Flows from riparian habitats and wetlands
 - (i) Uncontaminated water from foundations or from footing drains
 - (j) Lawn watering
 - (k) Dechlorinated swimming pool discharges
 - (l) Uncontaminated groundwater
 - (m) Water from individual residential car washing
 - (n) Routine external building washdown (which does not use detergents or other compounds)
5. In the event that the Borough of Sugarcreek or Pennsylvania DEP determines that any of the discharges identified in Article XII(A)(4) is a significant contributor to pollution to the Waters of the Commonwealth, the responsible person(s) shall be notified to cease the discharge. Upon notice provided by the Borough of Sugarcreek or Pennsylvania DEP, the discharger will have a reasonable time, as determined by the Borough of Sugarcreek or Pennsylvania DEP, to cease the discharge, consistent with the degree of pollution caused by the discharge.

6. Nothing in this Section shall affect a discharger's responsibilities under the laws of the Commonwealth of Pennsylvania.

B. ROOF DRAINS:

Roof drains and sump pumps shall discharge to infiltration areas, vegetative BMPs, or pervious areas to the maximum extent practicable.

C. ALTERATION OF BMPS:

1. No person shall modify, remove, fill, landscape, or alter any existing stormwater BMP, facilities, areas, or structures unless it is part of an approved maintenance program, without the written approval of the Borough of Sugarcreek.
2. No person shall place any structure, fill, landscaping, or vegetation into a stormwater BMP, facilities, areas, structures, or within a drainage easement which would limit or alter the functioning of the BMP without the written approval of the Borough of Sugarcreek.

**ARTICLE XIII
FEES AND EXPENSES**

A. GENERAL:

1. The fee required by this Ordinance is the Municipal Review Fee. The Municipal Review Fee shall be established by the Borough Council on a case-by-case basis to defray review costs incurred by the Borough of Sugarcreek. The Applicant shall pay all fees.

B. EXPENSES COVERED BY FEES:

1. The fees required by this Ordinance shall, at a minimum, cover:
 - (a) Administrative and clerical costs.
 - (b) Review of the SWM Site Plan and Report by the Borough of Sugarcreek.
 - (c) Pre-construction meetings.
 - (d) Inspection of stormwater management facilities/BMPs and drainage improvements during construction.
 - (e) Final inspection upon completion of the stormwater management facilities/BMPs and drainage improvements presented in the SWM Site Plan.
 - (f) Any additional work required to enforce any permit provisions regulated by this Ordinance, correct violations, and assure proper completion of stipulated remedial actions.

C. RECORDING OF APPROVED SWM SITE PLAN AND RELATED AGREEMENTS:

1. The owner of any land upon which permanent BMPs will be placed, constructed, or implemented, as described in the SWM Site Plan, shall record the following documents in the Office of the Recorder of Deeds of Venango County, within ten (10) days of approval of the SWM Site Plan by the Borough of Sugarcreek:
 - (a) The SWM Site Plan
 - (b) Operations and Maintenance (O&M) Agreement.
 - (c) Easements under Section IX.
 - (d) Riparian buffers under Section VI.
2. The Borough of Sugarcreek may suspend or revoke any approvals granted for the project site upon discovery of the failure of the owner to comply with this Section.

**ARTICLE XIV
ENFORCEMENT AND PENALTIES**

A. NOTIFICATION:

1. In the event that a person fails to comply with the requirements of this Ordinance, an approved SWM Site Plan, or fails to conform to the requirements of any permit or approval issued hereunder, the Borough of Sugarcreek shall provide written notification of the violation. Such notification shall set forth the nature of the violation(s) and establish a time limit for correction of these violation(s).
2. Failure to comply within the time specified shall subject such person to the penalties provisions of this Ordinance. All such penalties shall be deemed cumulative and shall not prevent the Borough of Sugarcreek from pursuing any and all other remedies. It shall be the responsibility of the owner of the real property on which any Regulated Activity is proposed to occur, is occurring, or has occurred, to comply with the terms and conditions of this Ordinance.

B. ENFORCEMENT:

1. The Zoning Officer or his designee is hereby authorized and directed to enforce all of the provisions of this Ordinance. The approved SWM Site Plan shall be on file at the project site throughout the duration of the construction activity. The Borough of Sugarcreek or its designee may make periodic inspections during construction.
2. Adherence to approved SWM Site Plan
 - (a) It shall be unlawful for any person to undertake any Regulated Activity on any property except as provided for by an approved SWM Site Plan and pursuant to the requirements of this Ordinance.
 - (b) It shall be unlawful for any person to alter or remove any control structure required by the SWM Site Plan pursuant to this Ordinance.
 - (c) It shall be unlawful for any person to allow a property to remain in a condition that does not conform to an approved SWM Site Plan.

C. PUBLIC NUISANCE:

1. A violation of any provision of this Ordinance is hereby deemed a public nuisance.
2. Each day that a violation continues shall constitute a separate violation.

D. SUSPENSION AND REVOCATION:

1. Any approval or permit issued by the Borough of Sugarcreek may be suspended or revoked for:
 - (a) Non-compliance with or failure to implement any provision of the approved SWM Site Plan or Operation & Maintenance (O&M) Agreement.
 - (b) A violation of any provision of this Ordinance or any other applicable law, ordinance, rule or regulation relating to the Regulated Activity.

- (c) The creation of any condition or the commission of any act, during the Regulated Activity which constitutes or creates a hazard or nuisance, pollution, or which endangers the life or property of others.
2. A suspended approval or permit may be reinstated by the Borough of Sugarcreek when:
 - (a) The Borough of Sugarcreek or their designee has inspected and approved the corrections to the violation(s) that caused the suspension.
 - (b) The Borough of Sugarcreek is satisfied that the violation(s) has been corrected.
3. An approval that has been revoked by the Borough of Sugarcreek cannot be reinstated. The Applicant may apply for a new approval under the provisions of this Ordinance.

E. PENALTIES:

1. Any person who violates the provisions of this Ordinance shall be guilty of a summary offense and upon conviction, shall be subject to a fine of not more than \$1,000.00 for each violation, recoverable with costs. Each day that the violation continues shall be a separate offense and penalties shall be cumulative.
2. In addition, the Borough of Sugarcreek, through the Borough Solicitor, 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.

F. APPEALS:

1. Any person aggrieved by any action of the Borough of Sugarcreek or its designee relevant to the provisions of this Ordinance, may appeal to the Council of the Borough of Sugarcreek within thirty (30) days of that action.
2. Any person aggrieved by any decision of the Council of the Borough of Sugarcreek, relevant to the provisions of this Ordinance, may appeal to the Venango County Court of Common Pleas within thirty (30) days of the Borough of Sugarcreek's decision.

SECTION TWO: All other ordinances or parts of ordinances conflicting with any of the provisions of this Ordinance are hereby repealed insofar as the same affect this Ordinance.

SECTION THREE: This Ordinance shall become effective April 10, 2011.

ENACTED AND ORDAINED into law by the Council of the Borough of Sugarcreek, Venango County, Pennsylvania, in lawful session assembled this 6th day of April, 2011.

