

Chapter 143

STORM WATER MANAGEMENT

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[HISTORY: Adopted 4-12-2004 by Ord. No. 2004-03.]

§ 143-1. Short Title.

This Ordinance shall be known and may be cited as the "South Greensburg Borough Storm Water Management Ordinance."

§ 143-2. Statement of Findings.

The Council of the Borough of South Greensburg finds that:

- A. Storm water runoff from lands modified by human activities threatens public health and safety by causing decreased infiltration of rainwater and increased runoff flows and velocities, which overtax the carrying capacity of existing streams and storm sewers, and greatly increases the cost to the public to manage storm water.
- B. Inadequate planning and management of storm water runoff resulting from land development and redevelopment throughout a watershed can also harm surface water resources by changing the natural hydrologic patterns, accelerating stream flows (which increase scour and erosion of stream-beds and stream-banks thereby elevating sedimentation), destroying aquatic habitat and elevating aquatic pollutant concentrations and loadings such as sediments, nutrients, heavy metals and pathogens. Groundwater resources are also impacted through loss of recharge.
- C. A program of storm water management, including reasonable regulation of land development and redevelopment causing loss of natural infiltration, is fundamental to the public health, safety, welfare, and the protections of the people of the Municipality and all the people of the Commonwealth, their resources, and the environment.
- D. Storm water can be an important water resource by providing groundwater recharge for water supplies and base flow of streams, which also protects and maintains surface water quality.
- E. Public education on the control of pollution from storm water is an essential component in successfully addressing storm water.

- F. Federal and state regulations require certain municipalities to implement a program of storm water controls. These municipalities are required to obtain a permit for storm water discharges from their separate storm sewer systems under the National Pollutant Discharge Elimination System (NPDES).
- G. Non-storm water discharges to municipal separate storm sewer systems can contribute to pollution of waters of the Commonwealth by the Township.

§ 143-3. Purpose

The purpose of this Ordinance is to promote health, safety, and welfare within the Township and its watershed by minimizing the harms and maximizing the benefits described in § 102 of this Ordinance, through provisions designed to:

- A. Manage storm water runoff impacts at their source by regulating activities that cause the problems.
- B. Provide review procedures and performance standards for storm water planning and management.
- C. Utilize and preserve the existing natural drainage systems as much as possible.
- D. Manage storm water impacts close to the runoff source, which requires a minimum of structures and relies on natural processes.
- E. Focus on infiltration of storm water, to maintain groundwater recharge, to prevent degradation of surface and groundwater quality and to otherwise protect water resources.
- F. Maintain existing flows and quality of streams and watercourses.
- G. Meet legal water quality requirements under state law, including regulations at 25 Pa. Code Chapter 93.4(a) to protect and maintain "existing uses" and maintain the level of water quality to support those uses in all streams, and to protect and maintain water quality in "special protection" streams.
- H. Prevent scour and erosion of stream banks and streambeds.
- I. Provide for proper operations and maintenance of all permanent storm water management BMP's implemented in the Township.
- J. Provide a mechanism to identify controls necessary to meet the NPDES permit requirements.
- K. Implement an illegal discharge detection and elimination program to address non-storm water discharges into the Municipality's separate storm sewer system.

§ 143-4. Statutory Authority.

The Township is empowered to regulate land use activities that affect storm water runoff under the authority of the provisions of the Second-Class Township Code, 53 P.S. §67701 et seq. and specifically the terms of 53 P.S. §67704.

§ 143-5. Applicability.

- A. This Ordinance applies to any Regulated Earth Disturbance activities within the Township of Salem, and all storm water runoff entering into the Township's separate storm sewer system from lands within the boundaries of the Township.
- B. Earth Disturbance activities and associated storm water management controls are also regulated under the existing state law and implementing regulations. This Ordinance is intended to 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 existing state law and those implementing regulations referenced herein.

§ 143-6. Repealer.

Any other Ordinance, parts of Ordinances, Resolutions, parts of Resolutions or other regulations of the Township inconsistent with any of the provisions of this Ordinance are hereby repealed to the extent of the inconsistency only and this Ordinance shall be deemed controlling.

§ 143-7. Severability.

In the event that any section or provision of this Ordinance is declared invalid by a court of competent jurisdiction, such decision shall not affect the validity of any of the remaining provisions of this Ordinance and the remaining terms of same shall continue in full force and effect.

§ 143-8. Compatibility with Other Requirements.

- A. Approvals issued and actions taken under this Ordinance do not relieve the Applicant of the responsibility to secure required permits or approvals for activities regulated by any other Federal, State or Local code, law, regulation or Ordinance. To the extent that this Ordinance imposes more rigorous or stringent requirements for storm water management, the specific requirements contained in this Ordinance shall be followed and controlling.
- B. Nothing in this Ordinance shall be construed to affect any Township requirements regarding storm water matters not conflict with the provisions of this Ordinance, such as local storm water management design criteria (e.g. inlet spacing, inlet type, collection system design and details, outlet structure design, etc.). Conflicting provisions in other Municipal Ordinances, now in effect or hereafter enacted, or regulations associated with same, shall be construed to retain the requirements of this ordinance addressing State Water Quality Requirements.

CHAPTER 2
Storm Water Quality Management

ARTICLE II
General Interpretation and Definitions

§ 143-9. General Interpretation.

For the purposes of this Ordinance, certain terms and words used herein shall be interpreted as follows:

- A. Words used in the present tense include the future tense; the singular number includes the plural, and the plural numbers include the singular; words of masculine gender include feminine gender; and words of feminine gender include masculine gender.
- B. The words "includes" or "including" shall not limit the term to the specific example but are intended to extend their meaning to all other instances of like kind and character.
- C. The words "shall" and "must" are mandatory; the words "may" and "should" are permissive.

143-10. Definitions.

The following terms, whenever used in this Ordinance hereafter shall have the meanings indicated in this section, except where the context indicates a different meaning. Those definitions set forth in Chapter 3, Section 904 hereafter are likewise incorporated herein by reference thereto. To the extent any definition set forth in Chapter 3, Section 904 is inconsistent with the definition of any of the terms set forth hereafter, those definitions set forth in this Section shall be controlling for purposes of this Chapter 2 only.

ACCELERATED EROSION - The removal of the surface of the land through the combined action of human activities and the natural processes, at a rate greater than would occur as a result of the natural process alone.

APPLICANT - A landowner, developer or other person who has filed an application for approval to engage in any Regulated Earth Disturbance activity at a project site in the Municipality.

BOROUGH - South Greensburg Borough, Westmoreland County, Pennsylvania.

BMP (BEST MANAGEMENT PRACTICE) - Schedules of activities, prohibitions of practices, structural controls (e.g. infiltration trenches), design criteria, maintenance procedures and other management practices to prevent or reduce pollution to the waters of the Commonwealth. BMP's include Erosion and Sedimentation Control Plans, Post Construction Stormwater Management Plans, Stormwater Management Act Plans and other treatment requirements, operating procedures and practices to control runoff, spillage or leaks, sludge or waste disposal, drainage from raw material storage, and methods to reduce pollution, recharge groundwater, enhance stream base flow and to reduce the threat of flooding and stream bank erosion.

CONSERVATION DISTRICT - The Westmoreland County Conservation District.

DEPARTMENT - The Pennsylvania Department of Environmental Protection (DEP).

DEVELOPER - See "Earth Disturbance Activity." The term includes redevelopment of an existing Development Site.

DEVELOPMENT SITE - The specific tract or parcel of land where any Earth Disturbance activities in the Township are planned, contemplated, laid out, conducted or maintained.

DIRECTOR - The Secretary of the Department of Environmental Protection or any authorized employee thereof.

EARTH DISTURBANCE ACTIVITY - A construction or other human activity which disturbs the surface of the land, including, but not limited to, clearing and grubbing, grading, excavations, embankments, road maintenance, building construction and the moving, depositing, stockpiling or storing of soil, rock or earth materials, other than activity which occurs during the normally practiced course of farming operations.

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

EROSION AND SEDIMENT CONTROL PLAN - A plan for a project site which identifies BMP's to minimize accelerated erosion and sedimentation.

GROUNDWATER RECHARGE - Replenishment of existing natural underground water supplies.

IMPERVIOUS SURFACE - Any surface which prevents the infiltration of water into the ground. The term "Impervious Surface" includes, but is not limited to, any roof, parking lot or driveway areas, and any new or reconstructed streets and sidewalks. Any surface areas designed to initially be gravel or crushed stone shall be assumed to be impervious surfaces.

MUNICIPALITY - South Greensburg Borough, Westmoreland County, Pennsylvania. Also referred to hereafter as the "Borough."

MUNICIPAL SEPARATE STORM SEWER SYSTEM (MS4) - A separate storm sewer (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, manmade channels or storm drains), which include, but is not limited to, the following:

1. A system owned or operated by a state, city, town, borough, township, county district, association, authority, or any other public body created under state law having jurisdiction over the disposal of sewage, industrial wastes, storm water or other wastes;
2. A system designed or used for collecting or conveying storm water;
3. A system which is not a combined sewer; and/or
4. A system which is not a part of a Publicly Owned Treatment Works.

NOI - The Notice of Intent for Coverage under the NPDES General Permit for discharges from Small Municipal Separate Storm Sewer Systems.

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

OUTFALL - The "Point Source" as described in 40 CFR §122.2 at the point where the Borough's storm sewer system discharges into surface waters of the Commonwealth or where an MS4 discharges into those surface waters of the Commonwealth; "outfall" does not include open conveyances connecting two (2) municipal separate storm sewers, or pipes, tunnels or other conveyances which connect segments of the same stream or other surface waters which are used to convey surface waters.

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

POINT SOURCE - Point source as defined by 25 Pa. Code §92.1, which includes any discernible, confined and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, vessel, or other floating craft from which pollutants are or may be discharged.

PROJECT SITE - The specific area of land where any Regulated Earth Disturbance activity in the Borough is planned to occur, conducted or maintained.

REDEVELOPMENT - Earth Disturbance activities on land which has been previously disturbed or developed.

REGULATED EARTH DISTURBANCE ACTIVITY - Those construction activities which result in land disturbance of greater than one (1) acre or more and/or land disturbance on a development site of less than one (1) acre where such development site is part of a larger common plan of development or sale that equals one (1) acre or more. Provided, however, that any construction activities associated with commercial, industrial, institutional or other business-related purposes shall be deemed Land Disturbance Activity regardless of the size of the area of disturbance.

ROAD MAINTENANCE - Earth disturbance activities within an existing road cross-section, such as grading and repairing existing unpaved road surfaces, cutting road banks, cleaning or clearing drainage ditches and other similar activities.

SEPARATE STORM SEWER SYSTEM - A structure, conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels or storm drains) primarily used for collecting and conveying storm water runoff.

SMALL MUNICIPAL SEPARATE STORM SEWER SYSTEM - A municipal separate storm sewer system (MS4):

1. Designated by the EPA at pages 68828-68831 of the Federal Register Volume 64, number 235 (December 8, 1999) based on the 1990 Decennial Census;
2. Designated by the EPA based on the 2000 Decennial Census;
3. Designated by the DEP based on the process described in 40 CFR §123.35 unless waived by the DEP pursuant to the process described in 40 CFR §123.35.

STATE WATER QUALITY REQUIREMENTS - As defined under state regulations - protection of designated and existing uses - (See 25 Pa. Code Chapters 93 and 96) - including:

- A. Each stream segment in Pennsylvania having a "designated use, such as "cold water fishery" or "potable water supply," which are listed in Chapter 93. These uses must be protected and maintained as provided by state regulations.
- B. "Existing uses" attained as of November 1975, regardless of whether they have been designated in Chapter 93. Regulated Earth Disturbance activities must be designed to protect and maintain existing uses and maintain the level of water quality necessary to protect those uses in all streams, and to protect and maintain water quality in special protection streams.
- C. Water quality involving the chemical, biological and physical characteristics of surface water bodies. After Regulated Earth Disturbance activities are complete, these characteristics can be impacted by the addition of pollutants such as sediment, and changes in habitat through increased flow volumes and/or rates as a result of changes inland surface area from those activities.

Therefore, permanent discharges to surface waters must be managed to protect the stream bank, stream bed and structural integrity of the waterway, to prevent impact.

STORM WATER - Runoff from precipitation, snow melt runoff, surface runoff and drainage.

SURFACE WATERS OF THE COMMONWEALTH - Any and all rivers, streams, creeks, rivulets, impoundments, ditches, watercourses, storm sewers, lakes, dammed water, wetlands, ponds, springs and all other bodies or channels of conveyance of surface water, or parts thereof, whether natural or artificial, within or on the boundaries of this Commonwealth.

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

WATERSHED - Region or area drained by a river, watercourse or other body of water, whether natural or artificial.

ARTICLE III

Storm Water Management Requirements

§ 143-11. General Requirements for Storm Water Management.

- A. All Regulated Earth Disturbance Activities within the Municipality shall be designed, implemented, operated and maintained to meet the purposes of this Ordinance, through these two elements:
 - 1. Erosion and Sediment control during the earth disturbance activities (e.g., during construction), and
 - 2. Water quality protection measures after completion of earth disturbance activities (e.g., after construction), including operations and maintenance.
- B. No Regulated Earth Disturbance activities within the Municipality shall commence until the requirements of this Ordinance are met.
- C. Erosion and sediment control during Regulated Earth Disturbance activities shall be addressed as required by §303.
- D. Post-construction water quality protection shall be addressed as required by §304. Operations and maintenance of permanent storm water BMPs shall be addressed as required by Article IV herein.
- E. All Best Management Practices (CMPs) used to meet the requirements of this Ordinance shall conform to State Water Quality Requirements and/or any more stringent requirements as may be determined by the Township hereafter.
- F. Techniques described in Appendix A (Low Impact Development) of this Ordinance are encouraged, as they are deemed to reduce the costs of complying with the requirements of this Ordinance and State Water Quality Requirements.

§ 143-12. Permit Requirements by Other Government Entities.

The following permit requirements may apply to certain Regulated Earth Disturbance Activities, and must be met prior to commencement of Regulated Earth Disturbance Activities, when applicable:

- A. All Regulated Earth Disturbance Activities subject to permit requirements by the DEP under regulations set forth in 25 Pa. Code Chapter 102.

- B. Work within natural drainage ways subject to permit by the DEP under 25 Pa. Code, Chapter 105.
- C. Any storm water management facility that would be located in or adjacent to surface waters of the Commonwealth, including wetlands, subject to permit by the DEP under 25 Pa. Code, Chapter 105.
- D. Any storm water management facility that would be located on a State highway right-of-way, or require access from a State highway, shall also be subject to approval by the Pennsylvania Department of Transportation (PENNDOT).
- E. Culverts, bridges, storm sewers or any other facilities which must pass or convey flows from a tributary area and any facility which may constitute a dam subject to permit by DEP under 25 Pa. Code Chapter 105.

§ 143-13. Erosion and Sediment Control During Regulated Earth Disturbance Activities.

- A. No Regulated Earth Disturbance Activities within the Municipality shall commence until approval by the Westmoreland *Conservation District* of an Erosion and Sediment Control Plan for construction activities.
- B. The DEP has regulations that require an Erosion and Sediment Control Plan for any earth disturbance activity of 5,000 square feet or more, under 25 Pa. Code §102.4(b) that are applicable to Regulated Earth Disturbance Activities within the Township.
- C. In addition, under 25 Pa. Code Chapter 92, a DEP "NPDES Construction Activities" permit is required for Regulated Earth Disturbance activities.
- D. Evidence of the issuance of any necessary permit(s) for Regulated Earth Disturbance activities from the appropriate DEP regional office of County Conservation District must be provided to the Municipality prior to the issuance of any Local Permit under this Ordinance.
- E. A copy of the Erosion and Sediment Control plan and any required permit, as required by DEP regulations, shall be available at the project site at all times.

§ 143-14. Water Quality Requirements after Regulated Earth Disturbance Activities are Complete.

- A. No Regulated Earth Disturbance Activities within the Municipality shall commence until approval by the Municipality of a plan which demonstrates compliance with State Water Quality Requirements after construction is complete.
- B. BMPs must be designed, implemented and maintained to meet State Water Quality Requirements, and any other more stringent requirements as determined by the Township.
- C. To control post-construction storm water impact from Regulated Earth Disturbance activities, State Water Quality Requirements can be met by BMPs including site design, providing for replication of pre-construction storm water infiltration and runoff conditions, so that post-construction storm water discharges do not degrade the physical, chemical or biological characteristics of the receiving waters. As described in the DEP Comprehensive Storm Water Management Policy (#392-0300-002, September 28, 2002), this may be achieved by the following:
 1. Infiltration: replication of pre-construction storm water infiltration conditions.
 2. Treatment: use of water, quality treatment BMPs to ensure filtering out of the chemical and physical pollutants from the storm water runoff, and

3. Streambank and Streambed Protection: management of volume and rate of post-construction stormwater discharges to prevent physical degradation of receiving waters (e.g., from scouring).
- D. DEP has regulations that require municipalities to ensure the design, implementation and maintenance of Best Management Practices ("BMPs") that control runoff from new development and redevelopment after Regulated Earth Disturbance Activities are complete. These requirements include a requirement to implement post construction storm water BMPs with assurance of long-term operations and maintenance of those BMPs.
- E. Evidence of any necessary permit(s) for Regulated Earth Disturbance Activities from the appropriate DEP regional office must be provided to the Municipality.
- F. Acceptable BMP operations and maintenance requirements are described in Article IV of this Ordinance.

ARTICLE IV

BMP Operation and Maintenance Plans

§ 143-15. General Requirements for Storm Water BMP Operation and Maintenance Plan Requirements.

- A. No Regulated Earth Disturbance Activities within the Municipality shall commence until approval by the Municipality of BMP Operations and Maintenance Plan which describes how permanent (e.g., post construction) storm water BMPs will be properly operated and maintained.
- B. The following items shall be included in the BMP Operations and Maintenance Plan:
 1. Map(s) of the project area, in a form that meets the requirements for recording in the Office of the Recorder of Deeds of Westmoreland County. The contents of the map(s) shall include, but not limited to:
 - a. Clear identification of the location and nature of permanent storm water BMPs;
 - b. The location of the project site relative to highways, municipal boundaries or other identifiable landmarks;
 - c. Existing and final contours at intervals of two feet, or others as may be appropriate;
 - d. Existing streams, lakes, ponds, or other bodies of water within the project site area;
 - e. Other physical features including flood hazard boundaries, sinkholes, streams, existing drainage courses, and areas of natural vegetation to be reserved;
 - f. The locations of all existing and proposed utilities, sanitary sewers, and water lines within 50 feet of property lines of the project site;
 - g. Proposed final changes to the land surface and vegetative cover, including the type and amount of impervious area that would be added;
 - h. Proposed final structures, roads, paved areas, and buildings;
 - i. A fifteen-foot wide access easement around all storm water BMPs that would provide ingress to and egress from a public right-of-way;
 - j. A description of how all permanent storm water BMPs will be operated and maintained, and the identity of the person(s) responsible for operation and maintenance;

- k. The name of the project site, the name and address of the owner of the property, and the name of the individual or firm preparing the Plan; and
- l. A statement, signed by the landowner, acknowledging that the storm water BMPs are fixtures that can be altered or removed only after approval by the Municipality.

§ 143-16. Responsibilities for Operation and Maintenance of BMPs.

- A. The BMP Operation and Maintenance Plan for the project site shall establish responsibility for the continuing operation and maintenance of all permanent storm water BMPs as follows:
 1. If a Plan includes structures or lots which are to be separately owned and in which streets, sewers and other public improvements are to be dedicated to the Municipality, storm water BMPs may also be dedicated to and maintained by the Municipality;
 2. If a Plan includes operations and maintenance in single ownership, or if sewers and other public improvements are to be privately owned and maintained, then the operation and maintenance of storm water BMPs shall be the responsibility of the owner or private management entity.
- B. The Borough shall make the final determination of the responsibility for continuing operations and maintenance. The Borough reserves the right to accept or reject operation and maintenance responsibility for any or all storm water BMPs.

§ 143-17. Municipal Review of BMP Operation and Maintenance Plans.

- A. The Municipality shall review the BMP Operation and Maintenance Plan for consistency with the purposes and requirements of this Ordinance, and any permits issued by the DEP.
- B. The Municipality shall notify the Applicant in writing whether the BMP operations and Maintenance Plan is approved.
- C. The Municipality shall require an "As-Built Drawings" of all storm water BMPs, and an explanation of any discrepancies with the Operation and Maintenance Plan.
- D. Following construction, the developer shall submit drawings bearing the seal of a registered professional engineer indicating that the as-built improvements called for in the approved plan have been constructed according to the plans and specifications as approved by South Greensburg Borough. No occupancy of the structure for which the storm water management plan was prepared will be permitted until the built drawings have been received by the Borough and approved by their designee.

§ 143-18. Adherence to Approved BMP Operation and Maintenance Plan.

It shall be unlawful to alter or remove any permanent storm water BMP required by an approved BMP Operation and Maintenance Plan, or to allow the property to remain in a condition which does not conform to an approved BMP Operation and Maintenance Plan, unless an exception is granted in writing by the Borough.

§ 143-19. Operations and Maintenance Agreement for Privately Owned Storm Water BMPs.

- A. The property owner shall sign an operation and maintenance agreement with the Municipality covering all privately-owned storm water BMPs. This agreement shall be substantially in the same form as the agreement in Appendix B of this Ordinance, the form of which is hereby approved by the Borough.
- B. The Township may require additional provisions in the agreement where deemed necessary by the Township to guarantee the satisfactory operation and maintenance of the permanent storm water BMP. The agreement shall be subject to review and approval by the Borough.

§ 143-20. Water Management Easements.

- A. Storm water management easements are required for all areas used for off-site storm water control, unless a waiver is granted by the Borough Engineer.
- B. Storm water management easements shall be provided by the property owner if necessary for (1) access for inspections and maintenance, or (2) preservation of storm water runoff conveyance, infiltration, and detention areas and other BMPs, by persons other than the property owner. The purpose of the easement shall be specified in any agreement under §405.

§ 143-21. Recording of Approved BMP Operation and Maintenance Plans and Related Agreements.

- A. The owner of any land upon which permanent BMPs will be placed, constructed or implemented as described in the BMP Operation and Maintenance Plan, shall record the following documents in the Office of the Recorder of Deeds of Westmoreland County, within 15 days of approval of the BMP Operation Plan by the Municipality:
 - 1. The Operation and Maintenance Plan or a summary thereof;
 - 2. The Operation and Maintenance Agreement or Agreements prepared under §405 above; and
 - 3. Easements granted under §406 above.
- B. The Municipality may suspend or revoke any approvals granted for the project site upon discovery of the failure of the owner to comply with this Section.

§ 143-22. Municipal Storm Water BMP Operation and Maintenance Fund.

- A. If a storm water BMP is accepted by the Borough for dedication, the Borough may require any person installing the storm water BMP to pay a specified amount to the Municipal Storm Water BMP Operation and Maintenance Fund, to help defray costs of operations and maintenance activities. The amount may be determined as follows:
 - 1. If the BMP is to be owned and maintained by the Municipality, the amount shall cover the estimated costs for operations and maintenance for ten (10) years, as determined by the Municipality.
 - 2. The amount shall then be converted to present worth of the annual services' values.
- B. If a BMP is proposed that also serves as a recreation facility (e.g., ball field, lake), the Municipality may adjust the amount due accordingly.

- C. The Borough hereby establishes the fund referenced herein for purposes associated with the operation and maintenance of storm water BMPs taken over by the Borough.

ARTICLE V

Inspection of Premises

§ 143-23. Inspections.

- A. The Borough acknowledges that the DEP or its designee normally ensure compliance with permits issued, including those for storm water management. In addition to DEP compliance programs, the Borough or its designee may inspect all phases of the construction, operation, maintenance and any other implementation of storm water BMPs.
- B. During any stage of the Regulated Earth Disturbance Activity, if the Municipality or its designee determines that any BMP is not being implemented in accordance with this Ordinance, the Municipality may suspend or revoke any existing permits or other approvals previously issued by the Township until the deficiencies are corrected.

§ 143-24. Right of Entry.

- A. Upon presentation of proper credentials, any duly authorized representatives of the Municipality may enter at reasonable times upon any property within the Municipality to inspect the implementation, condition, or operation and maintenance of any storm water BMP to ensure compliance with the terms of this Ordinance or matters associated herewith.
- B. BMP owners and operators shall allow persons working on behalf of the Municipality ready access to all parts of the premises for the purposes of determining compliance with this Ordinance.
- C. Persons working on behalf of the Municipality shall have the right to temporarily locate on any BMP in the Municipality any device deemed necessary to conduct monitoring and/or sampling of the discharges from such BMP.
- D. Unreasonable delays in allowing the Municipality access to a BMP shall be a violation of this Article.

ARTICLE VI

Fees and Expenses - Generally

§ 143-25. Fees and Expenses - Generally.

The Municipality may charge a reasonable fee for review of BMP Operation and Maintenance Plans to defray review costs incurred by the Municipality. The Applicant shall pay all such fees.

§ 143-26. Expenses Covered by Fees.

The fees required by this Ordinance may cover:

- A. Administrative/clerical costs.
- B. The review of the BMP Operation and Maintenance Plan by the Municipal Engineer.
- C. Site inspections including, but not limited to, pre-construction meetings, inspections during construction of storm water BMPs, and final inspection following completion of the storm water BMP.
- D. Any additional work required to monitor and/or enforce any provisions of this Ordinance, correct violations, and ensure proper completion of stipulated remedial actions.

ARTICLE VII
Discharges

§ 143-27. Prohibited Discharges.

- A. No person or entity in the Municipality shall allow, or cause to allow, storm water discharges into the Municipality's separate storm sewer system which are not composed entirely of stormwater, except (1) as provided in subsection B below, and (2) discharges allowed under a state or federal permit.
- B. Discharges which may be permitted, following a finding by the Municipality that the discharge(s) do not significantly contribute to pollution to surface waters of the Commonwealth, are:

<ul style="list-style-type: none"> Discharges from fire fighting activities drains including dechlorinated water line and fire hydrant flushing's Irrigation drainage Routine external building washdown (which does not use detergents or other compounds) Air conditioning condensate Water from individual residential car washing Springs Water from crawl space pumps 	<ul style="list-style-type: none"> Uncontaminated water from foundation or from footing Flows from riparian habitats wetlands Lawn watering 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 Dechlorinated swimming pool discharges Uncontaminated groundwater 	<ul style="list-style-type: none"> Potable-water sources
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- C. In the event that the Township determines that any of the discharges identified in Subsection B significantly contribute to pollution of waters of the Commonwealth, or is so notified by DEP, the Municipality will notify the responsible person to cease the discharge
- D. Upon notice provided by the Township under subsection C. the discharger will have a reasonable time, as determined by the Municipality, to cease the discharge consistent with the degree of pollution caused by the discharge.
- E. Nothing in this Section shall affect a discharger's responsibilities under state law.

§ 143-28. Prohibited Connections.

- A. The following connections are prohibited, except as provided in §701.B above:
 - 1. Any drain or conveyance, whether on the surface or subsurface, which allows any non-storm water discharge including sewage, process wastewater, and wash water, to enter the separate storm sewer system, and any connections to the storm drain system from indoor drains and sinks; and
 - 2. Any drain or conveyance connected from a commercial or industrial land use to the separate storm sewer system which has not been documented in plans, maps, or equivalent records, and approved by the Municipality.

§ 143-29. Roof Drains.

- A. Roof drains shall not be connected to streets, sanitary or storm sewers or roadside ditches, except as provided in §703. B.
- B. When it is more advantageous to connect directly to streets or storm sewers, connections of roof drains to streets or roadside ditches may be permitted by the Municipality.
- C. Roof drains shall discharge to infiltration areas or vegetative BMPs to the maximum extent practicable.

§ 143-30. Alteration of BMPs.

- A. No person shall modify, remove, fill, landscape or alter any existing stormwater BMP, unless it is part of an approved maintenance program, without the written approval of the Municipality.
- B. No person shall place any structure, fill, landscaping or vegetation into a stormwater BMP or within a drainage easement, which would limit or alter the functioning of the BMP, without the written approval of the Municipality.

**ARTICLE VIII
Enforcement and Penalties**

§ 143-31. Public Nuisance.

- A. The violation of any provision of this Ordinance is hereby deemed a Public Nuisance.
- B. Each day that a violation continues shall constitute a separate violation.

§ 143-32. Enforcement Generally.

- A. Whenever the Township finds that a person has violated a prohibition or failed to meet a requirement of this Ordinance or BMP, the Municipality may order compliance by written notice to the responsible person. Such notice may require without limitation:
 - 1. The performance of monitoring, analyses, and reporting;
 - 2. The elimination of prohibited connections or discharges;
 - 3. Cessation of any violating discharges, practices, or operations;
 - 4. The abatement or remediation of storm water pollution or contamination hazards and the restoration of any affected property;

5. Payment of a fine to cover administrative and remediation costs;
 6. The implementation of storm water BMPs; and
 7. Operation and maintenance of storm water BMPs.
- B. Such notification shall set for the nature of violation(s) and establish a time limit for correction of these violation(s). Said notice may further advise that, if applicable, should the violator fail to take the required action within the established deadline, the work will be done by the Municipality or designee with the expense thereof charged to the violator.
- C. Failure to comply within the time limitations specified shall also subject such person to the penalty provisions of this Ordinance. All such penalties shall be deemed cumulative and shall not prevent the Municipality from pursuing any and all other remedies available in law or equity.

§ 143-33. Suspension and Revocation of Permit and Approvals.

- A. Any building, land development or other permit or approval issued by the Municipality may be suspended or revoked by the Municipality for:
1. Non-compliance with or failure to implement any provision of the permit;
 2. A violation of any provision of this Ordinance; or
 3. The creation of any condition or the commission of any act during construction or development which constitutes or creates a hazard or nuisance, pollution or which endangers the life or property of others.
- B. A suspended permit or approval may be reinstated by the Municipality when:
1. The Municipal Engineer or designee has inspected and approved the corrections to the storm water BMPs, or the elimination of the hazard or nuisance, and/or;
 2. The Municipality is satisfied that the violation of the Ordinance, law or rule and regulation has been corrected.
- C. A permit or approval which has been revoked by the Municipality cannot be reinstated. The applicant may apply for a new permit under the procedures outlined in this Ordinance.

§ 143-34. Penalties.

- A. Any person violating 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 less than \$500.00 nor more than \$1000.00 for each violation, recoverable with costs, and, in lieu or default of payment thereof, be sentenced to the maximum period of imprisonment permissible for summary offenses, or both. Each day that the violation continues shall constitute a separate offense without the necessity of a separate citation.

In addition, the Municipality, through its solicitor, may institute 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.

CHAPTER 3
Storm Water Quantity Management

ARTICLE IX
Statement of Purpose, General Provisions and Definitions

§ 143-35. Purpose.

The purpose of the following Sections is to limit and restrict storm water runoff peak flows from subdivisions and other land development to predevelopment flow rates as indicated herein.

§ 143-36. Applicability.

- A. The following activities are included within the scope of this chapter:
1. Land developments, including, without limitation, all commercial, industrial and institutional development regardless of size and whether or not such development is considered new or as an addition to existing, commercial, industrial or institutional development. Development of individual residential lots that predate this Ordinance shall be exempt from the provisions of this Ordinance.

2. All subdivisions consisting of four (4) or more lots, regardless of the overall size of the development. Enumeration of lots shall include the residual tract.
 3. Construction of new or additional impervious or semi pervious surfaces (driveways, roadways, parking lots, buildings and additions thereto) which increases the rate of runoff equal to or more than thirty-hundredths (0.30) cubic feet per seconds (cfs) as calculated using the Rational Formula for a ten-year storm.
 4. Earthmoving activity involving one (1) or more acre of land.
- E. Normal agricultural and farming uses shall be exempt from the operation of this Ordinance.

§ 143-37. Compliance with Other Provisions.

Permits and approvals issued pursuant to this chapter do not relieve the applicant of the responsibility to secure required permits or approvals for activities regulated by any other applicable code, rule, act, ordinance, or regulatory agency. If more stringent requirements concerning regulation or storm water control are contained in the other code, rule, or ordinance, the more stringent regulations shall apply.

§ 143-38. Definitions.

The following terms, whenever used in this Ordinance hereafter shall have the meanings indicated in this section, except where the context indicates a different meaning. Those definitions set forth in Chapter 2, §202 above are likewise incorporated herein by reference thereto. To the extent any definition set forth in Chapter 2, §202 above is inconsistent with the definition of any of the terms set forth in this Section, those definitions set forth in this Section shall be controlling for purposes of this Chapter 3 only.

CONSERVATION DISTRICT - The Westmoreland County Conservation District.

CULVERT - A pipe, conduit or similar structure, including appurtenant works, which carries surface water.

DESIGNEE - Unless otherwise noted, the official designee of South Greensburg Borough for action on behalf of the Borough under the terms of this chapter shall be the Borough Engineer.

DESIGN STORM - The magnitude of precipitation from a storm event measured in probability of occurrence (e.g., one-hundred-year storm) and duration (e.g., twenty-four-hour) and used in computing storm water management control systems.

DETENTION BASIN - A basin designed to detain storm water runoff by having a controlled discharge system.

DEVELOPER - Any landowner, agent of such landowner or tenant with the permission of such landowner who makes or causes to be made a subdivision of land or a land development as described in this Ordinance.

DRAINAGE EASEMENT - A right granted by a landowner to a grantee permitting the use of private land for storm water management purposes.

HYDRAUL GRADE LINE - A line joining points whose vertical distance from the center of the cross section of the fluid flowing in a pipe is proportional to the pressure in the pipe at the point.

HYDRAULIC GRADIENT - The slope of the hydraulic grade line.

IMPERVIOUS SURFACE - A surface which retards the percolation of water into the ground, e.g., asphalt, concrete and roofs.

LAND DEVELOPMENT - Any of the following activities:

1. The improvement of one (1) lot or two (2) or more contiguous lots, tracts, or parcels of land for any purpose involving a group of two (2) or more residential or nonresidential buildings, whether proposed initially or cumulatively, or a single nonresidential building on a lot or lots, regardless of the number of occupants, or tenure; or the division or allocation of land or space, whether initially or cumulatively, between or among two (2) or more existing or prospective occupants by means of, or for the purpose of, streets, common areas, leaseholds, condominiums, building groups or other features.
2. A subdivision of land.

LAND DISTURBANCE ACTIVITY - Any nonagricultural grading, earthwork, site preparation or construction activity which alters the vegetative cover, land contours or drainage patterns. Disturbance Activity, for purposes of this Chapter shall be deemed to be those construction activities which result in land disturbance of greater than one (1) acre or more and/or land disturbance on a development site of less than one (1) acre where such development site is part of a larger common plan of development or sale that equals one (1) acre or more. Provided, however, that any construction activities associated with commercial, industrial, institutional or other business-related purposes shall be deemed Land Disturbance Activity regardless of the size of the area of disturbance.

MUNICIPALITY - South Greensburg Borough, Westmoreland County, Pennsylvania

PEAK DISCHARGE - The maximum rate of flow of water at a given point and time resulting from a specified storm event.

PRIVATE ENTITY - A partnership, corporation, homeowner's association, condominium association or any other similar associations as distinguished from an individual lot owner.

RATIONAL FORMULA - A rainfall to runoff relation used to estimate peak flow, expressed by the following formula:

$$Q=CIA$$

Where:

Q = Peak runoff rate in cubic feet per second (cfs)

C = Runoff coefficient

I = Design rainfall intensity (inches per hour)

A= Drainage area in acres.

RECURRENCE INTERVAL - The average interval of time, stated in years, within which a given storm even will be equaled or exceeded once.

RETENTION BASIN - A basin designed to retard storm water runoff by having a controlled discharge system.

RUNOFF - That part of precipitation, which flows over the land.

SCS - Soil Conservation Service, United States Department of Agriculture.

SEMIPERVIOUS SURFACE - A surface such as stone, rock, or other materials which permits some vertical transmission of water.

SOIL COVER COMPLEX METHOD - A method of runoff computation developed by SCS and found in its publication Urban Hydrology for Small Watersheds, Technical Release No. 55, SCS, January, 1975, Revised 1986.

STORM SEWER - A system of pipes or conduits which carries intercepted surface runoff, street water or drainage but excludes domestic sewage and industrial wastes.

STORMWATER MANAGEMENT PLAN - The guidelines for managing storm water runoff in accordance with the provisions of this Ordinance.

STORMWATER STRUCTURES - Basins, pipes, swales, terraces, etc., designed and installed to collect, transport, detain and/or retain storm water.

SUBDIVISION - The division or redivision of a lot, tract or parcel of land by any means into two (2) 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, partition by the court for distribution to heirs or devisees, transfer of ownership or building or lot development; provided, however, that the subdivision by lease of land for agricultural purposes into parcels of more than ten (10) acres, not involving any new street or easement of access or any residential dwelling, shall be exempted.

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

TIME OF CONCENTRATION

(Tc) The time, in hours, that surface stormwater runoff takes to travel from the hydraulically most distant point in the drainage basin to the point under design consideration.

§ 143-39. General Provisions.

- A. Basis of calculations. Computations for determining storm water runoff and discharge for the design of storm water management facilities shall be based upon the methods described in TR-55, Urban Hydrology for Small Watersheds, or other method acceptable to the Borough designee, excepting that the Rational Method may be used when the Tc is less than one-tenth (0.1) hours.
- B. Recurrence interval (storm frequency data). The rainfall shall be determined using the United States Weather Service T.P. 40, for use with TR-55, or the National Oceanic and Atmospheric Administration Technical Memorandum NWS HYDRO-35, for use with the Rational Formula, or other valid data as deemed suitable by the Borough.
- C. Storm water runoff volumes. Storm water runoff shall be used on the following twenty-four-hour storm events or other valid data as deemed suitable by the Borough:

Recurrence Interval (YEARS)	Storm Volume (inches of rainfall)
2	2.7
10	4.0
25	4.6
50	5.0
100	5.4

- D. Storm duration. For use with TR-55 the storm rainfall shall have a twenty-four-hour duration with a SCS Type II time distribution. For use with the Rational Formula, the rainfall duration shall equal the watershed Tc.
- E. Maintenance of natural drainage ways. All-natural streams, channels, swales, drainage systems and/or areas of surface water concentration shall be maintained in their existing condition unless an exception is approved by South Greensburg Borough or official representative thereof. All encroachment activities shall comply with Chapter 105, Water Obstructions and Encroachments, of Title 25 of the Rules and Regulations of the Pennsylvania Department of Environmental Protection.

F. Method of stormwater runoff detention and control.

1. The following is a list of detention and control methods suitable for use in stormwater management systems. The selection of control methods is not limited to the ones present on this list:
 - a. Detention and/or retention structures
 - b. Grass channels and vegetated strips
 - c. Routed flow over grass
 - d. Decreased impervious areas coverage
 - e. Porous pavement and concrete lattice block surface
 - f. Cisterns and underground reservoirs including piping systems
 - g. Rooftop storage
 - h. Parking lot and street ponding
2. The Borough, however, reserves the right to approve or deny any or all of the above control methods as to any individual project. Certain other control methods which meet the criteria of this subsection will be permitted when approved by the Borough or an official representative thereof.

ARTICLE X
System Design

§ 143-40. Design Criteria.

- A. Total system requirements. All pre-development calculations shall be based upon existing land use features. Agricultural lands shall be considered as using conservation treatment or in good condition regardless of the current condition.
 1. Release rates from subdivisions or land developments shall be based on the runoffs calculated pursuant to recurrence intervals as set forth in §905 above.
 2. Storage structures shall be designed so that the post-development ten-year peak discharge rate will not exceed the pre-development two-year peak discharge rate. Also, the design should assure that the post-development fifty-year peak discharge rate does not exceed the pre-development twenty-five-year peak discharge rate does not exceed the pre-development twenty-five-year peak discharge rate.
 3. All storage structures or facilities will be designed with emergency spillways sufficient to handle the one-hundred-year post-development storm event less flow through the primary spillway.
 4. Culverts, pipes and other water-carrying structures shall be designed to handle the peak discharge from the ten-year post-development storm event. All pipes shall be provided with an end sections or end wall. Refer to Plate A.
- B. Stormwater inlets. The maximum spacing between storm water inlets shall be designed according to the ten-year storm flow and the capacity of the inlets, considering gradient of roadway, maximum allowable street flowing and drainageway capacity. When a possibility of clogging of grates, side opening or combination inlets exists, use the capacity reduction factors shown in Table 1 applied

to theoretical capacity of the inlet. The maximum amount of water that should be bypassed on to the next downstream inlet for inlets on continuous grades is ten percent (10%).

- C. The minimum allowable pipe diameter shall be fifteen (15) inches unless approved by the Borough or the Borough's representative. Horizontal and vertical curves with radii of one hundred (100) feet or greater are allowed for all pipe sizes.
- D. Spacing of structures. The maximum allowable spacing between structures to be used for inspecting and cleaning storm sewers shall be based on the pipe size and spacing shown in Table 3.
- E. Open channels. Maximum allowable velocities of flow in swales, open channels and ditches as relating in slope and grass cover are shown in Table 4.
- F. Spillway design. The outlets for the retention ponds shall consist of a combination of principal and emergency spillways. The outlets must pass the peak runoff expected from the drainage area for one-hundred-year storm without damage to the embankment of the pond.
- G. Principal spillway. The principal spillway shall consist of a solid vertical pipe or concrete box joined by a watertight connection to a horizontal pipe (barrel) extending through the embankment and out-letting beyond the downstream toe of the fill. The principal spillway shall have a minimum capacity of two-tenths (0.2) cfs per acre of drainage area when the water surface is at the crest of the emergency spillway. The maximum capacity of the barrel will be the twenty-five-year pre-development flow. The construction materials must be approved by the Borough. (Refer to Plate A attached hereto and incorporated herein).
- H. Design elevations. The crest of the principal spillway shall be a minimum of one and zero-tenths (1.0) feet below the crest of the emergency spillway. The crest of the principal spillway shall be a minimum of three (3) feet below the top of the embankment. (Refer to Plate A attached hereto and incorporated herein).
- I. Anti-vortex and trash rack. An anti-vortex device and trash rack shall be attached to the top of the principal spillway to improve the flow of water into the spillway and prevent floating debris from being carried out of the basins. The anti-vortex device shall be of the concentric type as shown in Plate B and Plate C (which are attached hereto and incorporated herein) or approved equivalent.
- J. Base. The base of the principal spillway must be firmly anchored to prevent its floating. If the riser of the spillway is greater than ten (10) feet in height, computations must be made to determine the anchoring requirements. As a minimum, a factor of safety of one and twenty-five hundredths (1.25) shall be used [downward forces = one and twenty-five hundredths (1.25) x upward forces]. For risers ten (10) feet or less in height, the anchoring may be done in one (1) of the two (2) following ways:
 - 1. A concrete base eighteen (18) inches thick and twice the width of the riser diameter shall be used and the riser embedded six (6) inches into the concrete. (See Plate D attached hereto and incorporated herein, for design details).
 - 2. A square steel plate, a minimum of one-fourth (1/4) inch thick and having a width equal to twice the diameter of the riser shall be welded to the base of the riser. The plate shall then be covered with two and five-tenths (2.5) feet of stone, gravel or compacted soil to prevent flotation. (See Plate D attached hereto and incorporated herein, for design details.)
- K. Barrel. The barrel of the principal spillway, which extends through the embankment, shall be designed to carry the twenty-five-year pre-development flow.
- L. Anti-seep collars.

1. Anti-seep collars shall be used on the barrel of the principal spillway within the normal saturation zone of the embankment to increase the seepage length by at least ten percent (10%) if either of the following conditions is met:
 - a. The settled height of the embankment exceeds ten (10) feet.
 - b. The embankment has a low silt clay content and the barrel is greater than ten (10) inches in diameter.
 2. Anti-seep collars shall be installed within the saturated zone. The maximum spacing between collars shall be fourteen (14) times the projection of the collar above the barrel. Collars shall not be closer than two (2) feet to a pipe joint. Connections between the collars and the barrel shall be watertight. See Plates E, F, and G for requirements and details on anti-seep collars.
- M. Emergency spillway. The emergency spillway shall consist of an open channel constructed adjacent to the embankment over undisturbed material. The emergency spillway shall be designed to carry the peak rate of runoff expected from a one-hundred-year storm, less any reduction due to the flow through the principal spillway. (See Plates H and I, attached hereto and incorporated herein, for design of the emergency spillway.)
- N. Embankment. The material and construction for the embankment shall meet the requirements of PADOT Publication 408, §206 "Embankment."
- O. Fence. A chain link fence must be installed around the pond at a height of six (6) feet. A ten-foot wide gate with lock and keys must be provided to allow access for future maintenance. Fence details and specifications shall be submitted to the Borough for approval. The fence requirements are waived where detention swales are utilized for storage. The maximum water depth in swales shall not exceed 2.0 feet with an average depth of 1.0 foot.
- P. Access road. The developer shall provide a ten-foot wide access road constructed of 2B stones at a depth of four (4) inches. Such access road shall run from the paved township street to the retention pond.

ARTICLE XI

Applications for Approval of Facilities

§ 143-41. Standards for Approval.

Prior to the final approval of subdivision, land development or any activity listed in §903 or the issuance of any permit or the commencement of any land disturbance activity, the owner, sub divider, developer or his/her agent shall submit a storm water management plan to South Greensburg Borough for approval. The plan shall meet the requirements set forth herein and shall also meet all requirements of Title 25, Chapter 102, of the Rules and Regulations of the Pennsylvania Department of Environmental Protection. A copy of the Storm Water Management Plan shall also be provided to the Westmoreland Conservation District for review and comment.

§ 143-42. Plan Requirements.

The following items, where appropriate, shall be included in the plan:

- A. General.
 1. A general description of the project.
 2. A general description of the storm water controls both during and after development.

3. Expected project time schedule, including anticipated start and completion dates.
4. A statement of the training and experience of the person(s) preparing the plan.
5. An executed signature block by a registered professional engineer, registered land surveyor or registered architect stating as follows:

"I, _____, have prepared and hereby certify that the storm water management plan meets all design standards and criteria of South Greensburg Borough's Storm Water Management Ordinance."

B. Map(s) of the project area showing:

1. The location of the project relative to highways, municipalities or other identifiable landmarks.
2. Existing contours at intervals of two (2) feet. In areas of steep slope [greater than ten percent (10%)], five-foot contour intervals may be used.
3. Streams, lakes, ponds or other bodies of water within the project area or adjacent to the site affected by runoff from the project.
4. Other physical features, including wetlands, existing drainage swales and areas of natural vegetation to be preserved.
5. The location of existing overhead and underground utilities, sewers and water lines.
6. The location of proposed underground utilities, sewers and water lines.
7. Soil types and boundaries.
8. Proposed changes to land surface and vegetative cover.
9. Areas to be cut or filled.
10. Proposed structures, roads, paved areas and buildings.
11. Final contours at intervals of two (2) feet. In areas of steep slope [greater than ten percent (10%)], five-foot contour intervals may be used.
12. The location where water will exit the site and the means for discharging.

C. Storm water management controls. All storm water management controls must be shown on a map and described. Such description shall include:

1. All control devices or methods, such as rooftop storage, semi pervious paving materials, grass swales, parking lot ponding, vegetated strips, detention and retentions ponds, storm sewers or underground storage.
2. A schedule for installation of the control measures and devices.
3. All calculations, assumptions and criteria used in the design of the control device or method.
4. Sufficient rights-of-way which must be provided around all storm water management structures and from such structures to a public right of way.

D. Maintenance program. A maintenance program for all storm water management control facilities must be included. This program must include the proposed ownership for the control facilities and detail the financial responsibility for any required maintenance.

E. Priorities. The following priority process is established for facility ownership and maintenance:

1. Single Family Development (Individual lots)

- a. As first priority, the facilities shall be incorporated within individual lots so that the respective lot owners will own and be responsible for maintenance in accordance with recorded deed restrictions.
 - b. The second priority, in the event that the above priorities cannot be achieved, is to dedicate the facilities to the Township in accordance with this chapter and pursuant to the regulations and requirements as established hereunder.
2. Other Developments. All other developments shall own and maintain their storm water facilities. South Greensburg Borough will not own or maintain storm water facilities in commercial, industrial, institutional, or multi-family developments.

§ 143-43. Submission of Plan.

- A. The plan shall be accompanied by the requisite fee, determined by Resolution of the Council of South Greensburg Borough.
- B. Three (3) copies of the completed plan and calculations must be submitted.

§ 143-44. Plan Approval.

- A. South Greensburg Borough or its designee shall review the plan and provide written comments to the developer or his/her agent. Failure to address these comments will result in automatic disapproval of the plan.
- B. South Greensburg Borough or its designee shall notify the applicant within sixty (60) days from receipt of a completed plan submission of its decision to approve or disapprove the plan.
- C. Any disapproval shall contain the reasons for disapproval and a listing of the plan deficiencies.
- D. Failure of South Greensburg Borough or its designee to render a decision within sixty (60) days' time shall be deemed an approval.
- E. The applicant must secure Westmoreland Conservation District Approval for both Erosion and Sedimentation Control and Storm Water Management prior to Borough approval.

§ 143-45. Modification of Plan.

- A. A modification to an approved storm water management plan shall follow the same procedure as outlined in paragraph 11. A modification is required when a change in control methods, techniques or the relocation or redesign of control measures is proposed.

ARTICLE XII
Certifications, Inspections, Submission of
Drawings, Rights of Entry and Compliance

§ 143-46. Certification: Inspection.

The developer must submit a certification by a Pennsylvania registered professional engineer, registered land surveyor or registered architect, which certificate shall certify that all elements of the approved plan have been constructed as designed and approved.

- A. South Greensburg Borough or its designee may inspect all phases of development of the site.

- B. It is the responsibility of the developer to notify South Greensburg Borough or its designee at least forty-eighty (48) hours in advance of the completion of each identified phase of development.
- C. Any portion of the work which does not comply with the approved plan must be corrected by the developer. No work may proceed on any subsequent phase of the storm water management plan, the subdivision or land development or building construction until the required corrections have been made.

§ 143-47. As-Built Drawings.

- A. The Municipality shall require an "As-Built Drawings" of all storm water improvements and an explanation of any discrepancies with the terms of the proposed storm water management plan.
- B. Following construction, the developer shall submit drawings bearing the seal of a registered professional engineer indicating that the as-built improvements called for in the approved plan have been constructed according to the plans and specifications as approved by South Greensburg Borough. No occupancy of the structure for which the storm water management plan was prepared will be permitted until the as-built drawings have been received by the Borough and approved by their designee.

ARTICLE XIII
Fees, Expenses, Financial Guarantees,
Ownership and Operation of Facilities

§ 143-48. Fees.

- A. Fees covering costs to South Greensburg Borough for plan review and inspections shall be established by Resolution of the Borough. No approval to begin any work on the project shall be issued until the requisite fees have been paid.
- B. Modification of an existing storm water management plan shall require the payment of additional fees.

§ 143-49. Section Financial Guarantees.

- A. Financial security for construction. The developer or lot owner shall provide financial security as a construction guaranty, in a form to be approved by the Township, in an amount equal to one hundred ten percent (110%) of the full costs to install the facilities required by the approved plan. The financial security shall be released only after receipt by the Borough of certification and as-built drawings, as required.
- B. Financial security for maintenance. Upon completion of any storm water management facility within South Greensburg Borough, the developer shall provide financial security, in a form approved by the Borough, for maintenance guaranties as follows:
 - 1. Construction maintenance security. The construction maintenance security shall be in an amount equal to fifteen (15%) of the cost of the installation and shall be used as financial security to guarantee the stability of the newly established facilities and re-vegetation for a period of one (1) year.
 - 2. Long-term maintenance security. The long-term maintenance security shall be in an amount equal to a figure which shall be determined by the Borough to be the estimated cost of

maintenance of the stormwater management facility for a period of ten (10) years or by deposit with the Borough of an amount determined by the Borough Engineer as to be sufficient to provide for a long-term maintenance of said facility.

§ 143-50. Ownership and Maintenance of Facilities.

Unless storm water management facilities are constructed as part of a subdivision dedicated to the Borough where the Borough agrees to accept the dedication of the storm water management facilities, any storm water management facilities will not be owned or maintained by South Greensburg Borough but shall be owned and maintained by the owners of the private property on which such facilities are located.

- A. Maintenance by private entity. When a private entity retains ownership of any storm water management facility, such entity shall be responsible for maintenance of the facility. In such case, approval of storm water management facility plans shall be conditioned upon the private entity agreeing to be responsible for all maintenance of the storm water management facility. Any such agreement shall be in writing, shall be in recordable form and shall contain provisions permitting inspection at any reasonable time, by South Greensburg Borough or its designee, of all such facilities deemed critical to the public welfare; provided further, however, that said maintenance by a private entity shall be secured by performance security in an amount equal to one hundred and ten percent (110%) of the costs as determined by the Borough to be necessary to adequately maintain said system.
- B. Maintenance by individual lot owners. When any storm water management facility is located on an individual lot and when maintenance thereof is the responsibility of that landowner, a description of the facility or systems and the terms of the required maintenance shall be incorporated on the plat of the property. The plat shall be recorded with the Westmoreland County Recorder of Deeds within ninety (90) days following Borough approval. In addition, the Borough may require as a condition of approval that any deed conveying any interest in such lot contain language indicating that the conveyance is subject to an express covenant by the grantee that the grantee will maintain the storm water management facility.
- C. Failure to maintain. The failure of any person, individual lot owner or private entity to properly maintain any storm water management facility shall be construed to be a violation of this chapter is declared to be a public nuisance, subject to those penalties prescribed in Article XIV hereafter.

ARTICLE XIV Requests for Variances, Penalties and Other Violations of this Chapter

§ 143-51. Most Restrictive Provisions to Prevail.

In the event any other storm water management plan is duly adopted and approved by the appropriate governmental agency or body which is more restrictive than the provisions of this Ordinance the more restrictive storm water management plan shall prevail.

§ 143-52. Violations and Penalties.

- A. Any activity conducted in violation of this chapter is declared to be a public nuisance.

1. Inspections. Upon presentation of proper credentials, duly authorized representatives of South Greensburg Borough may enter at any reasonable time upon any property with the Borough to investigate or to ascertain the condition of the subject property with regard to any matter regulated by this chapter.
 2. Notice. Whenever any person shall have violated the terms of this chapter, the Borough shall cause a written notice to be served upon the owner, applicant, developer, property manager or other person the Borough deems responsible for the property of the violation directing him to comply with all terms of this chapter within seven (7) days, or such additional period, not to exceed thirty (30) days, and the Borough shall give notice to the owner, applicant, developer, property manager or other persons deemed responsible for the property, or responsible for the creation of the violation, that if the violation is not corrected, the Borough may correct the same and charge the landowner, or other person responsible, with the cost thereof plus penalties, as specified herein, for failure to comply.
 3. Service of notice. Such notice shall be delivered by the United States Mail, first class, postage prepaid, and by certified mail or by personal service, or if the property is occupied, by posting the notice at a conspicuous place upon the subject property.
- B. Any person who fails to comply with the Notice prescribed in this chapter within the period stated in the notice of the Borough, or who shall violate or fail to comply with any other term or provision of this chapter, shall be guilty of summary offense and, upon conviction thereof, shall be sentenced to pay a fine of not less than \$500.00, nor more than \$1000.00. Each day a violation continues shall constitute a separate violation without the necessity of filing a subsequent citation. Upon failure to pay such fine, or in lieu thereof, the violator shall be sentenced to incarceration for the maximum period permitted for summary offenses under the laws of the Commonwealth of Pennsylvania.
- C. Corrective measures by Borough; Costs. In the event that the owner, developer, occupant, applicant, property manager or other person responsible for either the property or the conditions existing thereupon, fails to comply with the terms of this chapter within the time specified by the Borough, the Municipality may take any actions necessary to remove the public nuisance. The costs of removal of the violation shall be in addition to any penalties for violations for failure to comply.
- D. Additional legal proceedings. In addition to those fines for violations, costs and penalties provided for by this chapter, the Municipality may institute proceedings in a Court of law or equity to collect damages and/or to require owners and/or occupants of real estate to comply with the provisions of this chapter.
- E. Municipal lien. The costs of removal, fine, and penalties herein above mentioned may be entered by the Municipality as a lien against such property in accordance with existing provisions of law or collected through such other methods available to the Borough for the collection of same, such method being deemed to include, but not be limited to, the initiation of an appropriate civil action.
- F. Existing rights and penalties preserved. The collection of any penalty under the provisions of this chapter shall not be construed as an estoppel to the Commonwealth of Pennsylvania, the County of Westmoreland, South Greensburg Borough or any aggrieved person from proceeding in any Courts of law or equity to abate nuisances under other existing laws or to restrain, at law or in equity, a violation of this chapter. Moreover, it is hereby declared to be the purpose of this chapter to provide additional and cumulative remedies to abate nuisances.

§ 143-53. Appeals and Variances.

Any person aggrieved by any action of the designee of South Greensburg Borough may appeal to the Borough Council within thirty (30) days of that action. Any property owner or developer may request a variance from the strict application of any provision of this chapter arising out of problems with topography or the configuration of parcels of land. Such variances may be requested from the Borough Council of South Greensburg Borough, who shall act upon such requests pursuant to the Local Agency Law. Fees for such appeals and variances shall be established from time to time by Resolution of the Borough Council of South Greensburg Borough.

STORMWATER MANAGEMENT

**TABLE 1
SOUTH GREENSBURG BOROUGH
INLET CAPACITY REDUCTION FACTORS
ASSUMING PARTIAL CLOGGING**

<u>Condition</u>	<u>Inlet Type</u>	<u>Reduction Factor*</u>
Sump	Side Opening	0.80
Sump	Grate	0.50
Sump	Combination	0.65
Continuous grade	Side opening	0.80
Continuous grade	Side opening with deflector	0.75
Continuous grade	Longitudinal bars	0.60
Continuous grade	Transverse bars	0.50
Continuous grade	Combination	0.60

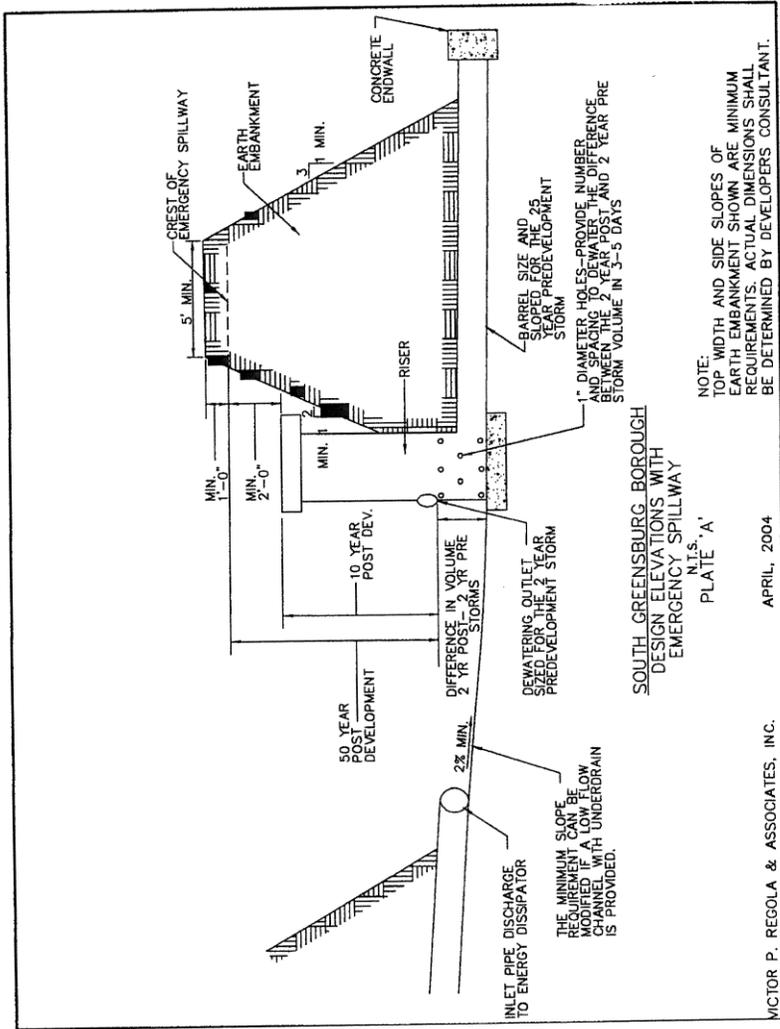
NOTES:

*Percentage of theoretical capacity.

STORMWATER MANAGEMENT

TABLE 2
SOUTH GREENSBURG BOROUGH
SPACING OF INSPECTION AND CLEANOUT
STRUCTURES FOR STORM SEWERS

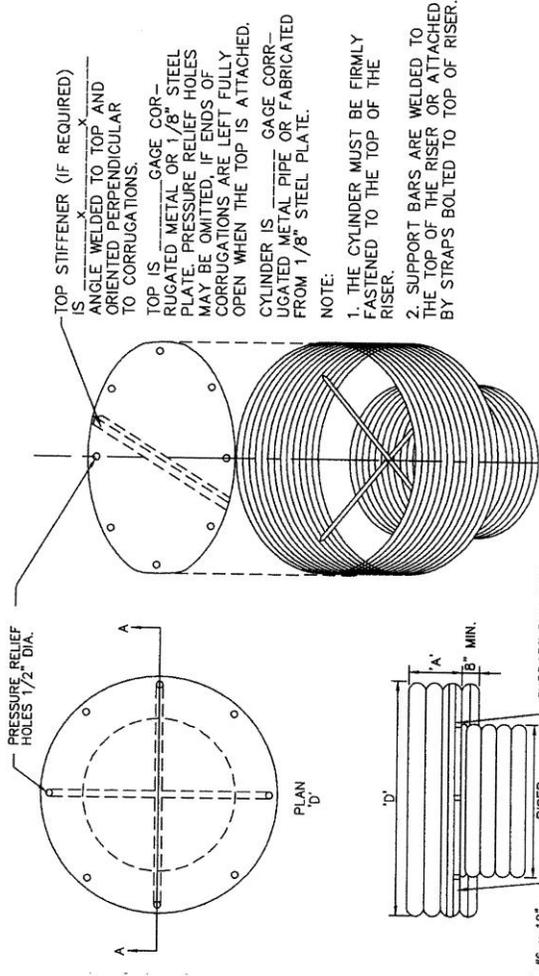
<u>Size of Pipe</u> <u>(Inches)</u>	<u>Maximum Allowable Spacing</u> <u>(Feet)</u>
15	400
18 - 36	500
42 - 60	700
66 or larger	Unlimited



SOUTH GREENSBURG BOROUGH
 DESIGN ELEVATIONS WITH
 EMERGENCY SPILLWAY
 N.T.S. 'A'

NOTE:
 TOP WIDTH AND SIDE SLOPES OF
 EARTH EMBANKMENT SHOWN ARE MINIMUM
 REQUIREMENTS. ACTUAL DIMENSIONS SHALL
 BE DETERMINED BY DEVELOPERS CONSULTANT.

VICTOR P. REGOLA & ASSOCIATES, INC.
 APRIL, 2004



SOUTH GREENSBURG BOROUGH
 ANTI - VORTEX DEVICE
 N.T.S.
 PLATE 'B'

VICTOR P. REGOLA & ASSOCIATES, INC.

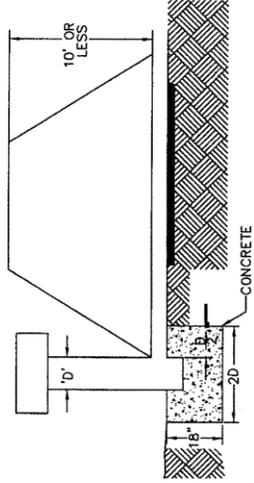
**STORMWATER MANAGEMENT
SOUTH GREENSBURG BOROUGH
CONCENTRIC TRASH RACK AND ANTI-VORTEX DEVICE DESIGN TABLE**

Riser Diam. In.	Cylinder			Minimum Size Support Bar	Minimum Top	
	Diam. In.	Thick., Gage	H. in.		Thickness	Stiffener
12	18	16	6	#6 Rebar	16 Ga.	-
15	21	16	7	"	"	-
18	27	16	8	"	"	-
21	30	16	11	"	"	-
24	36	16	13	"	14 Ga.	-
27	42	16	15	"	"	-
36	54	14	17	#8 Rebar	12 Ga.	-
42	60	14	19	"	"	-
48	72	12	21	1- 1/4" pipe or 1- 1/4x1-1/4x1/4 angle	10 Ga.	-
54	78	12	25	"	"	-
60	90	12	29	1-1/2" pipe or 1-1/2x1-1/2x1/4 angle	8 Ga.	-
66	96	10	33	2" pipe or 2x2x3/16 angle	8 Ga. w/stiffener	2x2x1/4 angle
72	102	10	36	"	"	2-1/2x2- 1/2x 1/4 angle
78	114	10	39	2-1/2" pipe or 2x2x1/4 angle	"	-
84	120	10	42	2-1/2" pipe or 2-1/2x2-1/2x1/4 angle	"	2-1/2x2- 1/2x5/16 angle

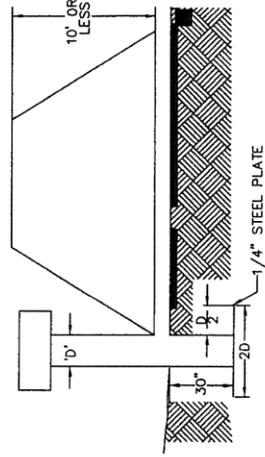
Note: The criterion for sizing the cylinder is that the area between the inside of the cylinder and the outside of the riser is equal to or greater than the area inside the riser. Therefore, the above table is invalid for use with concrete pipe risers.

PLATE C

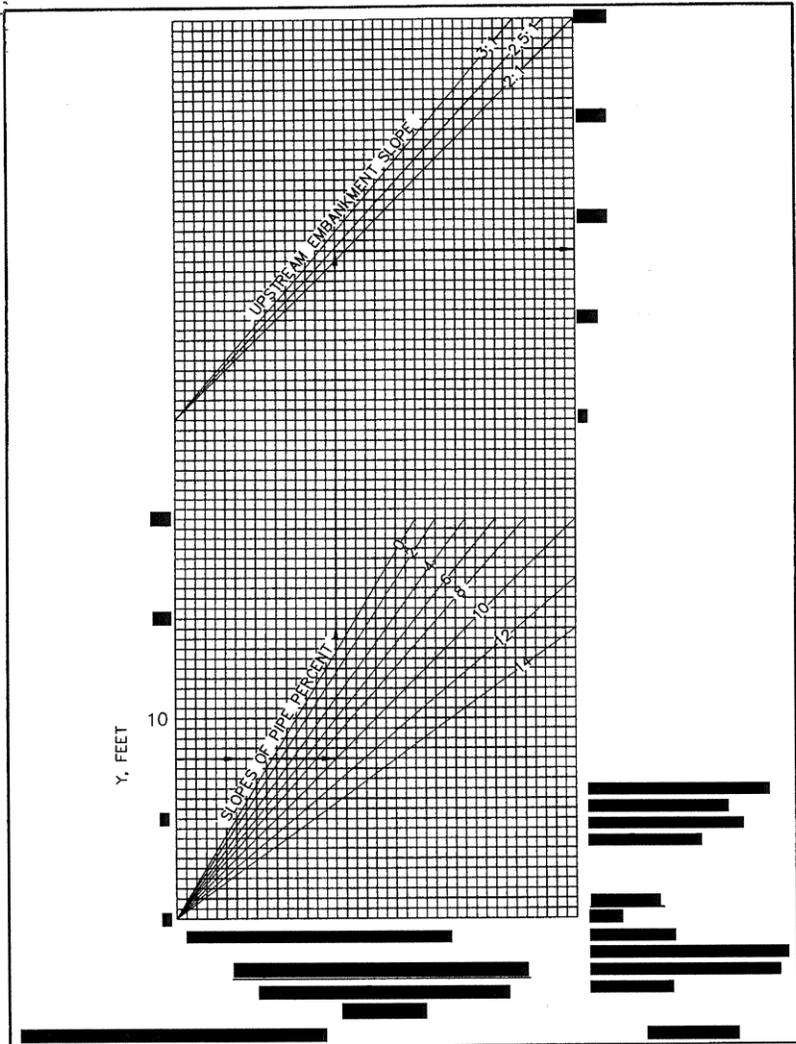
CONCRETE BASE FOR EMBANKMENT
10' OR LESS IN HEIGHT

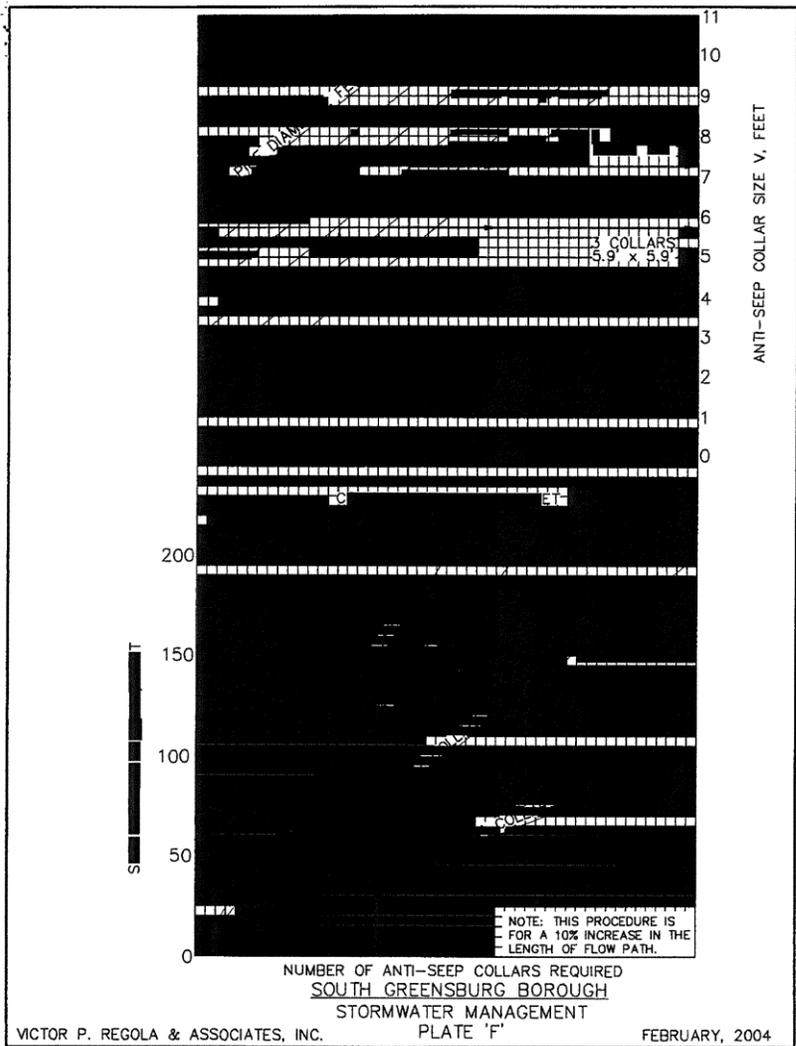


STEEL BASE EMBANKMENT
10' OR LESS IN HEIGHT



SOUTH GREENSBURG BOROUGH
RISER PIPE BASE CONDITIONS FOR EMBANKMENTS
LESS THAN 10' HIGH
PLATE 'D'





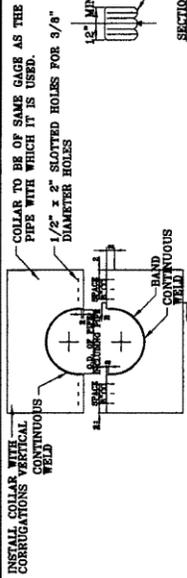
- 3. UNASSEMBLED COLLARS SHALL BE MARKED BY PAINTING OR TAGGING TO IDENTIFY *****
- 4. THE LAP BETWEEN THE TWO HALF SECTIONS AND BETWEEN THE PIPE AND CONNECTING ***** SHALL BE CAULKED WITH ASPHALT MASTIC AT ***** OF INSTALLATION.
- 5. EACH COLLAR SHALL BE FURNISHED WITH TWO 1/2" DIAMETER RODS WITH STANDARD TANK LUGS FOR CONNECTING COLLARS TO PIPE.

NOTE FOR BANDS AND COLLARS: MODIFICATIONS OF THE DETAILS SHOWN MAY BE USED PROVIDING EQUAL STRENGTHNESS IS MAINTAINED AND DETAILED DRAWINGS ARE

- NOTES FOR COLLARS
- 1. ALL MATERIALS TO BE IN ACCORDANCE WITH CONSTRUCTION AND CONSTRUCTION MATERIAL SPECIFICATIONS.
 - 2. WHEN SPECIFIED ON THE PLANS, COATING OF COLLARS SHALL BE IN ACCORDANCE WITH CONSTRUCTION AND CONSTRUCTION MATERIAL SPECIFICATIONS.

- DETAILS OF METAL PIPE ANTI-SEEP COLLAR
- NOTE: TWO OTHER TYPES OF ANTI-SEEP COLLARS ARE:
- 1. CORRUGATED METAL ***** TO UPPER CERAMIC, EXCEPT SHOP WELDED TO A SHORT (2 FT.) SECTION OF THE PIPE AND CONNECTED WITH CONNECTING BANDS TO THE PIPE.
 - 2. CONCRETE, SIX INCHES THICK FORMED AROUND THE PIPE WITH 13 REBAR COATED 15" HORIZONTALLY AND VERTICALLY.

SOUTH GREENSBURG BOROUGH
 DETAILS OF CORRUGATED METAL ANTI-SEEP COLLAR
 PLATE 'G'



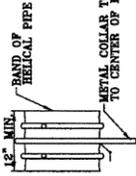
ELEVATION OF UNASSEMBLED COLLAR

NOTES FOR COLLARS:
 1. ALL MATERIALS TO BE IN ACCORDANCE WITH CONSTRUCTION AND CONSTRUCTION MATERIAL SPECIFICATIONS, ON THE PLANS, COATING SPECIFICATIONS AND CONSTRUCTION MATERIAL SPECIFICATIONS.

3. UNASSEMBLED COLLARS SHALL BE MARKED BY PAINTING OR TAGGING TO IDENTIFY MATCHING PAIRS.
 4. THE GAP BETWEEN THE TWO HALF SECTIONS SHALL BE FILLER FREE AND CONCRETE BAND SHALL BE CAULKED WITH ASPHALT MASTIC AT TIME OF INSTALLATION.
 5. EACH COLLAR SHALL BE FURNISHED WITH TWO LUGS FOR CONNECTING COLLARS TO PIPE.

SIZE AND SPACING OF SLOTTED OPENINGS SHALL BE THE SAME AS SHOWN FOR CM COLLAR

SHOWN



USE RODS AND LUGS TO CLAMP BANDS SECURELY TO PIPE

PARTIAL ELEVATION

REF. ENGR. FIELD MANUAL (USDA-SCS) FOR DETAILS OF FABRICATION DIMENSIONS, MINIMUM GAGES, SLOTTED HOLES, AND NOTES, SEE DETAIL ABOVE.

DETAILS OF HELICAL PIPE ANTI-SLEEP COLLAR

NOTE: TWO OTHER TYPES OF ANTI-SLEEP COLLARS ARE:
 1. CORRUGATED METAL, SIMILAR TO UPPER DETAIL, EXCEPT SHOP WELDED TO A SHORT (4 FT.) SECTION OF THE PIPE AND CONCRETE BANDS SIX INCHES THICK FORMED AROUND THE PIPE WITH #3 REBAR SPACED 15" HORIZONTALLY AND VERTICALLY.



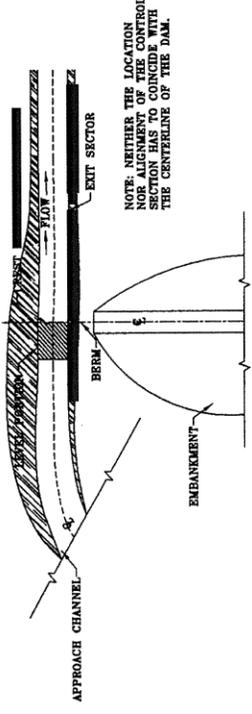
NOTE FOR BANDS AND COLLARS: MODIFICATIONS OF THE DETAILS SHOWN MAY BE USED PROVIDING EQUAL WATER-TIGHTNESS IS MAINTAINED AND DETAILED DRAWINGS ARE APPROVED BY THE ENGINEER PRIOR TO DELIVERY.

SHEET METAL COLLAR SHALL BE CUT TO FIT CORRUGATIONS OF HELICAL BAND, AND WELDED WITH A CONTINUOUS WELD.

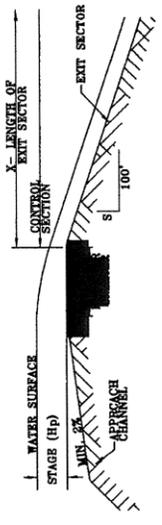
SOUTH GREENSBURG BOROUGH
 PLATE 'G'

APRIL, 2004

VICTOR P. REGOLA & ASSOCIATES, INC.



PLAN



PROFILE ALONG CENTERLINE

CROSS-SECTION AT CONTROL SECTION

**SOUTH GREENSBURG BOROUGH
STORMWATER MANAGEMENT
PLATE 'H'**

VICTOR F. REGOLA & ASSOCIATES, INC.

APRIL, 2004

