

Erosion, Sediment Control and Stormwater Management Local Law

Section 1. Findings of Fact

It is hereby determined that:

- 1.1 Uncontrolled drainage and runoff associated with land development has a significant impact upon the health, safety and welfare of the community.
- 1.2 Eroded soil endangers water resources by reducing water quality and causing the silting of streams, lakes and other water bodies adversely affecting aquatic life.
- 1.3 Stormwater runoff and sediment transports pollutants such as heavy metals, hydrocarbons, nutrients and bacteria to water resources, degrading water quality.
- 1.4 Eroded soil necessitates repair and accelerates the maintenance needs of stormwater management facilities.
- 1.5 Clearing, grading and altering natural topography during construction tends to increase erosion.
- 1.6 Improper design and construction of drainage facilities can increase the velocity of runoff, thereby increasing stream bank erosion and sedimentation.
- 1.7 Impervious surfaces increase the volume and rate of stormwater runoff and allow less water to percolate into the soil, thereby decreasing groundwater recharge and stream base flow.
- 1.8 Improperly managed stormwater runoff can increase the incidence of flooding and the severity of floods that occur, endangering property and human life.
- 1.9 Substantial economic losses can result from these adverse impacts.
- 1.10 Stormwater runoff, soil erosion and nonpoint source pollution can be controlled and minimized through the regulation of land development activities.

2 Section 2. Purpose

The purpose of this local law is to safeguard persons, protect property, and prevent damage to the environment in the City of Troy, New York. This local law will also promote the public welfare by guiding, regulating, and controlling the design, construction, use, and maintenance of any land development activity as it relates to erosion and sedimentation control and stormwater management. This local law seeks to meet these purposes by achieving the following objectives:

- 2.1 Meet the requirements of minimum control measures four (construction site stormwater runoff control) and five (post-construction stormwater management) of the State Pollution Discharge Elimination System (SPDES) General Permit for Stormwater Discharges from Municipal Separate Stormwater Sewer Systems (MS4s), Permit GP-02-02 or as amended or revised.

- 2.2 Require land development activities to conform to the substantive requirements of the NYS Department of Environmental Conservation (SPDES) General Permit for Construction Activities GP-02-01 or as amended or revised.
- 2.3 Minimize soil erosion and sedimentation impacts on streams, water bodies, and neighboring properties.
- 2.4 Avoid excessive and/or unnecessary tree and vegetation removal.
- 2.5 Minimize windblown soil associated with properties being cleared and graded for development.
- 2.6 Maintain the integrity of watercourses and sustain their hydrologic functions.
- 2.7 Minimize increases in the magnitude and frequency of stormwater runoff to prevent an increase in flood flows and the hazards and costs associated with flooding.
- 2.8 Minimize decreases in groundwater recharge and stream base flow to maintain aquatic life, assimilative capacity, and water supplies.
- 2.9 Facilitate the removal of pollutants in stormwater runoff to perpetuate the natural biological function of water bodies.

3 Section 3. Statutory Authority

In accordance with Article 10 of the Municipal Home Rule Law of the State of New York, the governing Board of the City of Troy has the authority to enact local laws and amend local laws for the purpose of promoting the health, safety or general welfare of the City of Troy and for the protection and enhancement of its physical environment. The City Council may include in any such local law provisions for the appointment of any municipal officer, employees, or independent contractor to effectuate, administer and enforce such local law.

4 Section 4. Applicability

- 4.1 Except as otherwise provided herein, no person shall commence or perform any land development activity, as defined herein, without the approval of a Stormwater Pollution Prevention Plan (SWPPP).
- 4.2 Applicants shall also obtain all other permits required by state, federal, and local laws. Whenever the particular circumstances of proposed land development activity require compliance with special use, site plan, or subdivision procedures of the City of Troy, the responsible board shall integrate the requirements prescribed herein as appropriate and determine the adequacy of the SWPPP.
- 4.3 No SWPPP is required for the following exempt activities:

- 4.3.1 Any emergency activity that is immediately necessary for the protection of life, property, or natural resources.
- 4.3.2 Agricultural operations conducted as a permitted principal or accessory use, including the construction of structures where the land disturbance is less than one acre.
- 4.3.3 Routine maintenance activities that disturb less than five acres and are performed to maintain the original line and grade, hydraulic capacity, or original purpose of a stormwater management facility.
- 4.3.4 Mining as defined herein.
- 4.3.5 The renovation/replacement of a septic system serving an existing dwelling or structure.
- 4.3.6 Normal lawn and landscaping activities/maintenance.
- 4.3.7 Activities of an individual engaging in home gardening by growing flowers, vegetables and other plants primarily for use by that person and his or her family.
- 4.3.8 Selective cutting of trees as defined herein, except log haul roads and landing areas are subject to this law. (Landing areas are cleared areas to which trees are hauled for their storage before being transferred offsite).
- 4.3.9 Repairs and maintenance of any stormwater management practice or facility.

5 Section 5. Definitions

Agriculture – The use of land for sound agricultural purposes, including farming, dairy, horse boarding, pasturing, grazing, horticulture, floriculture, viticulture, timber harvesting, animal and poultry husbandry, and those practices necessary for the on-farm production, preparation, and marketing of agricultural commodities. Agriculture does not include dude ranches or similar operations.

Certified Professional in Erosion & Sediment Control (CPESC) - A person who has received training and is certified by CPESC Inc, to review, inspect and/or maintain erosion and sediment control practices.

Commencement of Construction – The initial disturbance of soils associated with clearing, grading, or excavating activities, or other construction activities.

Clearing - Any activity that removes the vegetative surface cover.

Design Manual - The *New York State Stormwater Management Design Manual*, most recent version including applicable updates, which serves as the official guide for stormwater management principles, methods and practices.

Erosion – The wearing away of the land surface by action of wind, water, gravity, or other natural forces.

Erosion Control Manual - The most recent version of the “New York Standards and Specifications for Erosion and Sediment Control” manual, commonly known as the “Blue Book”.

Erosion and Sediment Control Plan - A set of plans prepared by or under the direction of a licensed/certified professional indicating the specific measures and sequencing to be used to control sediment and erosion on a development site during and after construction.

Grading - Excavation of fill, rock, gravel, sand, soil or other natural material, including the resulting conditions therefrom.

Land Development Activity – Construction activity including clearing, grading, excavating, soil disturbance, or placement of fill resulting in land disturbance of equal to or greater than one acre. Also includes activities disturbing less than one acre of total land area that are part of a larger common plan of development or sale, even though multiple separate and distinct land development activities may take place at different times on different schedules.

Licensed/Certified Professional – A person currently licensed to practice engineering, or Landscape Architecture in New York State or is a Certified Professional in Erosion and Sediment Control (CPESC).

Mining – Any excavation subject to permitting requirements of the State Department of Environmental Conservation under the Mined Land Reclamation Law (Environmental Conservation Law, Article 23, Title 27).

Notice of Intent (NOI) – A permit application prepared and filed by an owner or operator with the Department of Environmental Conservation as an affirmation that a stormwater pollution prevention plan (SWPPP) has been prepared and will be implemented in compliance with the State Pollution Discharge Elimination System General Permit for Stormwater Runoff for Construction Activity (GP-02-01).

Operator – The person, persons, or legal entity which owns or leases the property on which the construction activity is occurring.

Perimeter Control - A barrier that prevents sediment from leaving a site by filtering sediment-laden runoff or diverting it to a sediment trap or basin.

Phasing - Clearing a parcel of land in distinct phases, with the stabilization of each phase completed before the clearing of the next.

Project (Major) – Any land development activity that disturbs one (1) acre or more, including all commercial, industrial, or mixed use development, as well as any residential development consisting of buildings that contain two or more dwelling units, or any land development activity not classified as a minor project. (The operator of a major project

must submit a SWPPP that addresses water quality and quantity controls in addition to erosion and sedimentation controls.)

Project (Minor) – Any land development activity associated with a permitted agricultural use or single family residential construction/subdivision that disturbs between one (1) and five (5) acres and is not discharging stormwater directly to a water body listed on New York State 2002 Section 303(d) list of impaired water bodies. (At present in Rensselaer County, Snyders Lake is the only water body on the list due to phosphorous levels associated with urban runoff). (The operator of a minor project must submit a SWPPP that addresses, erosion and sedimentation controls.)

Selective Cutting- The cutting of more than one –half of the existing living trees measuring 6 inch diameter at breast height (DBH) in an area of one acre or more, over a period of two (2) consecutive years.

Sediment – Solid material, both mineral and organic, which is in suspension, is being transported, has been deposited, or has been removed from its site of origin.

Site - A parcel of land or a contiguous combination thereof, where grading work is performed as a single unified operation.

Site Development Permit - A permit issued by the municipality for the construction or alteration of ground improvements and structures for the control of erosion, runoff, and grading.

[Slopes (steep) – Ground areas with a slope greater than fifteen percent (15 %) covering a minimum horizontal area of ¼ acre or 10,890 square feet and a minimum horizontal dimension of ten (10) feet.]

[Slopes (severe) – Ground areas with a slope greater than twenty-five percent (25 %) covering a minimum horizontal area of ¼ acre or 10,890 square feet and a minimum horizontal dimension of ten (10) feet.]

SPDES General Permit for Stormwater Discharges from Construction Activity, GP-02-01– A Permit under the New York State Pollutant Discharge Elimination System (SPDES) issued to developers of construction activities to regulate disturbance of one or more acres of land.

SPDES General Permit for Stormwater Discharges from Municipal Separate Stormwater Sewer Systems GP-02-02– A Permit under the New York State Pollutant Discharge Elimination System (SPDES) issued to municipalities to regulate discharges from municipal separate storm sewers for compliance with EPA established water quality standards and /or to specify stormwater control standards.

Stabilization – Means covering or maintaining an existing cover or soil. Cover can be vegetative (e.g. grass, trees, seed and mulch, shrubs, or turf) or non-vegetative (e.g. geotextiles, riprap, or gabions).

Stabilization (Final) – Means that all soil disturbing activities at the site have been completed, and that a uniform perennial vegetative cover with a density of 80 percent has been established or equivalent stabilization measures (such as the use of mulches or geotextiles) have been employed on all unpaved areas and areas not covered by permanent structures.

Start of Construction - The first land-disturbing activity associated with a development, including land preparation such as clearing, grading, and filling.

Stormwater Pollution Prevention Plan – A plan for controlling stormwater runoff and pollutants from a site during and after construction activities.

Surface Waters of the State of New York – Lakes, bays, sounds, ponds, impounding reservoirs, springs, wells, rivers, streams, creeks, estuaries, marshes, inlets, canals, the Atlantic Ocean within the territorial seas of the state of New York and all other bodies of surface water, natural or artificial, inland or coastal, fresh or salt, public or private (except those private waters that do not combine or effect a junction with natural surface or underground waters), which are wholly or partially within or bordering the state or within its jurisdiction.

Storm sewers and waste treatment systems, including treatment ponds or lagoons which also meet the criteria of this definition are not waters of the state. This exclusion applies only to manmade bodies of water which neither were originally created in waters of the state (such as a disposal area in wetlands) nor resulted from impoundment of waters of the state.

Watercourse - Any body of water, including but not limited to lakes, ponds, rivers, streams, and intermittent streams.

[**Watercourse Buffer** – A horizontal distance 50 feet away from and parallel to the high water level of a watercourse.]

Wetlands –Those areas that are inundated or saturated by surface or ground water at a frequency or duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands include those areas determined to be wetlands by the U.S. Army Corps of Engineers and the New York State Department of Environmental Conservation.

6 Section 6. Review and Approval

- 6.1 No application for a land development activity shall be approved until the responsible board and/or department has received a Stormwater Pollution Prevention Plan (SWPPP) prepared in accordance with the specifications contained herein.
- 6.2 For land development activity not subject to special permit, site plan, or subdivision requirements, the City Engineer, or designated agent, shall review the SWPPP to determine its completeness and conformance with the provisions herein. Within thirty (30) days of receipt of a SWPPP the City Engineer, or designated agent, shall make a determination as to whether it is complete. If it is deemed incomplete, the applicant shall be notified in writing as to the deficiencies in the plan and the requirements for completeness. Within 30 days after receiving a complete plan, the City Engineer, or designated agent shall, in writing:
 - 6.2.1 Approve the permit application;
 - 6.2.2 Approve the permit application subject to such reasonable conditions as may be necessary to secure substantially the objectives of this regulation, and issue the permit subject to these conditions; or
 - 6.2.3 Disapprove the permit application, indicating the reason(s) and procedure for submitting a revised application and/or submission.
 - 6.2.4 Failure of the City Engineer, or designated agent, to act on a complete original or revised application within 30 days of receipt shall authorize the applicant to proceed in accordance with the plans as filed unless such time is extended by agreement between the applicant and the City. Pending preparation and approval of a revised plan, land development activities shall not be allowed to proceed. Nothing herein shall relieve an applicant's need to obtain a building permit as required by City Code or file an NOI with the NYS Department of Environmental Conservation.
- 6.3 For land development activity subject to special permit, site plan, or subdivision requirements, the responsible board shall incorporate the required SWPPP into the review process, allowing for public review and comment on the SWPPP. The responsible board, in consultation with the City Engineer, or designated agent, shall determine the adequacy of the SWPPP. For projects subject to subdivision requirements, preliminary plan approval shall not be granted until the Planning Board has received a SWPPP prepared in accordance with the specifications contained herein.
- 6.4 In its review of the plan, the responsible board or municipal official may consult with the City Engineer, the Rensselaer County Soil and Water Conservation District, the New York State Department of Environmental Conservation, or retain any other licensed/certified professionals qualified in the review and/or design of stormwater management and erosion control plans as are determined to be necessary to carry out the review of an SWPPP. Payment for the services of such professionals shall comply with Section 17 herein.

7 Section 7. Stormwater Pollution Prevention Plan Contents

The SWPPP shall include the following:

- 7.1 A written narrative identifying the project's scope including the location, type, and size of the project.
- 7.2 A site map/construction drawing(s) for the project, including a general location map. At a minimum, the site map should show the total site area; all improvements; areas of disturbance; areas that will not be disturbed; locations of off-site material, waste, borrow or equipment storage areas; and location(s) of stormwater discharge(s). The specific location(s), size(s), and length(s) of each erosion and sediment control practice shall also be shown. Site maps/construction drawings shall be at a scale no smaller than 1 inch equal 100 feet.
- 7.3 A natural resources map identifying existing vegetation; on-site and adjacent off-site surface water(s), wetlands, and drainage patterns that could be affected by the construction activity; and existing and final slopes.
- 7.4 A description of soil(s) present at the site along with any existing data that describes the stormwater runoff characteristics at the site.
- 7.5 A construction phasing plan describing the intended sequence of construction activities including clearing and grubbing; excavation and grading; utility and infrastructure installation, and any other activity at the site that results in soil disturbance. Phasing shall identify the expected date on which clearing will begin, the estimated duration of exposure of cleared areas, areas of clearing, installation of temporary erosion and sediment control measures, and establishment of permanent vegetation. Consistent with the *New York Standards and Specifications for Erosion and Sediment Control*, **there shall not be more than five (5) acres of disturbed soil at any one time without prior written approval from the Department of Environmental Conservation.**
- 7.6 A description of the pollution prevention measures that will be used to control litter, construction chemicals and construction debris from becoming a pollutant source in the stormwater discharges and runoff.
- 7.7 A description of construction and waste materials expected to be stored on-site with updates as appropriate, and a description of controls to reduce pollutants from these materials including storage practices to minimize exposure of the materials to stormwater, and spill prevention and response.
- 7.8 A description of the temporary and permanent structural and vegetative measures to be used for soil stabilization, runoff control and sediment control for each stage of the project from initial land clearing and grubbing to project close-out.

Depending upon the complexity of the project, the drafting of intermediate plans may be required at the close of each season.

- 7.9 The dimensions, material specifications (e.g. seeding mixtures and rates, types of sod, kind and quantity of mulching) and installation details for all erosion and sediment control practices, including the siting and sizing of any temporary sediment basins. Temporary practices that will be converted to permanent control measures shall be shown.
- 7.10 An implementation schedule for staging temporary erosion and sediment control practices, including the timing of initial placement and the duration that each practice should remain in place.
- 7.11 A maintenance schedule to ensure continuous and effective operation of the erosion and sediment control practices including estimates of the cost of maintenance.
- 7.12 Name(s) of the receiving water(s) and any existing data that describes the stormwater runoff at the site.
- 7.13 Identification of the person or entities responsible for implementation of the SWPPP for each part of the site.
- 7.14 A description of structural practices to divert flows from exposed soils, store flows, or otherwise limit runoff and the discharge of pollutants from exposed areas of the site to the degree attainable.
- 7.15 A site map/construction drawing(s) of each post-construction stormwater practice including a description of each post-construction stormwater control practice including, specific location(s) and size(s), dimensions, material specifications and installation details. The *New York State Stormwater Management Design Manual* shall serve as the technical design standard. Deviations from this Design Manual are permitted subject to review and approval by the New York State Department of Environmental Conservation within 60 business days of receipt of a completed Notice of Intent (NOI).

For major projects, the following shall also be provided:

- 7.16 A hydrologic and hydraulic analysis for all structural components of the stormwater control system for the applicable design storms.
- 7.17 A comparison of post-development stormwater runoff conditions with pre-development conditions.
- 7.18 Maintenance schedule to ensure continuous and effective operation of each post-construction stormwater control practice.

- 7.19 Maintenance easements to ensure access to all stormwater management practices at the site for the purpose of inspection and repair. Easements shall be recorded on the plan and shall remain in effect with transfer of title to the property.
- 7.20 Inspection and maintenance agreement binding on all subsequent landowners served by the on-site stormwater management measures in accordance with Article 2, Section 4 of this local law.

8 Section 8. Plan Certification

- 8.1 The SWPPP shall be prepared by a licensed/certified professional. The SWPPP must be signed by the professional preparing the plan and shall make the following certification:
- “I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that false statements made herein are punishable as a class A misdemeanor pursuant to Section 210.45 of the Penal Law.”

9 Section 9. Contractor Certification

- 9.1 The SWPPP must clearly identify each contractor(s) and subcontractor(s) involved in soil disturbance that will implement each stormwater and erosion control measure. Each contractor and subcontractor identified in the SWPPP shall sign a copy of the following certification statement before undertaking any land development activity:
- “I certify under penalty of law that I understand and agree to comply with the terms and conditions of the Stormwater Pollution Prevention Plan (SWPPP) as a condition of authorization to discharge stormwater. I also understand that the operator must comply with the terms and conditions of the New York State Pollutant Discharge Elimination System (“SPDES”) general permit for stormwater discharges from construction activities and that it is unlawful for any person to cause or contribute to a violation of water quality standards.”
- 9.2 The certification must include the name and title of the person providing the signature, address and telephone number of the contracting firm; the address (or other identifying description) of the site; and the date the certification is made.
- 9.3 The certification statement(s) shall become part of the SWPPP for the land development activity.

10 Section 10. SWPPP Review and Amendment

- 10.1 The permittee shall amend the SWPPP whenever there is a significant change in design, construction, operation, or maintenance which may have a significant effect on the potential for the discharge of pollutants to the waters of the United States and which has not otherwise been addressed in the SWPPP; or
- 10.2 The SWPPP proves to be ineffective in:
 - 10.2.1 Eliminating or significantly minimizing pollutants from sources identified in the SWPPP, or
 - 10.2.2 Achieving the general objectives of controlling pollutants in stormwater discharges from permitted construction activity.
- 10.3 Additionally, the SWPPP shall be amended to identify any new contractor or subcontractor that will implement any measure of the SWPPP.
- 10.4 Significant amendments or changes to the SWPPP as outlined above in 10.1 and 10.2 may be subject to review and approval in the same manner as Section 6 herein.

11 Section 11. Design and Performance Standards

- 11.1 Grading, erosion, and sediment control practices, and waterway crossings shall meet the design criteria set forth in the most recent version of the “*New York Standards and Specifications for Erosion and Sediment Control*” published by the Empire State Chapter of the Soil and Water Conservation Society. For the design of post-construction structures, the technical standards are currently detailed in the publication “*New York State Stormwater Management Design Manual*” published by the Department of Environmental Conservation.
- 11.2 [Cut and fill slopes shall be *no greater than 2:1*, except where retaining walls, structural stabilization or other methods acceptable to the City Designated Licensed/Certified Professional are used. Disturbed areas shall be restored as natural appearing landforms, and shall blend in with the terrain of adjacent undisturbed land. Abrupt, angular transitions shall be avoided.]
- 11.3 Clearing and grading shall be substantially confined to designated building envelopes, utility easements, driveways, and parking footprint. Clearing and grading techniques that retain natural vegetation and drainage patterns, as described in the most recent version of “*Standards and Specifications for Erosion and Sediment Control*” referenced above shall be used to the satisfaction of the responsible board. [No clearing or grading shall take place within the established 50 foot watercourse buffer area except to provide road crossings where permitted.]

- 11.4 [Clearing, except that necessary to establish sediment control devices shall not begin until all sediment control devices have been installed and have been stabilized.]
- 11.5 [Phasing shall be required on all sites disturbing greater than 30 acres, with the size of each phase to be established at plan review and as approved by the responsible board. **There shall not be more than five (5) acres of disturbed soil at any one time without prior written approval from the NYS Department of Environmental Conservation.**]
- 11.6 [The permittee shall initiate stabilization measures as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased. This requirement does not apply in the following instances:]
- 11.6.1 [Where the initiation of stabilization measures by the 14th day after construction activity temporarily or permanently ceased is precluded by snow cover or frozen ground conditions, stabilization measures shall be initiated as soon as practicable;]
- 11.6.2 [Where construction activity on a portion of the site is temporarily ceased, and earth-disturbing activities will be resumed within twenty-one (21) days, temporary stabilization measures need not be initiated on that portion of the site.]
- 11.7 [The mere parking and moving of construction vehicles around the site does not constitute construction or earth disturbing activity. If the permittee is not diligently pursuing the project toward completion as determined by the City Zoning Enforcement Officer or designated agent, he/she may issue a notice of violation (see Section 19.1) and stipulate that the stabilization measures as outlined above shall be undertaken to prevent site erosion.]
- 11.8 [If seeding or another vegetative erosion control method is used, it shall become established within 14 days or the applicant may be required to re-seed the site or use a non-vegetative option.]
- 11.9 [Special techniques that meet the design criteria outlined in the most recent version of “*Standards and Specifications for Erosion and Sediment Control*” shall be used to ensure stabilization on steep slopes or in drainage ways.]
- 11.10 [Soil stockpiles must be stabilized or covered at the end of each workday.]
- 11.11 [The entire site must be stabilized, using a heavy mulch layer or another method that does not require germination to control erosion, at the close of the construction season.]

- 11.12 [Techniques shall be employed to prevent the blowing of dust or sediment from the site.]
- 11.13 [Techniques that divert upland runoff past disturbed slopes shall be employed.]
- 11.14 [Adjacent properties shall be protected by the use of a vegetated buffer strip in combination with perimeter controls.]
- 11.15 [In general, wetlands and watercourses should not be filled, graded or altered. The crossing of watercourses should be avoided to the maximum extent practicable. When protection of wetlands, watercourses, trees, steep slopes or other environmentally sensitive area is required, the location shall be shown on the erosion control plan and the method of protection during construction identified (e.g., silt fence, construction fence, stakes, etc.). [A vegetative buffer (25' minimum) shall be maintained between disturbed areas and protected federal wetlands that are not proposed to be filled as part of an Army Corps of Engineers wetlands permit. In the case of state designated wetlands, the 100' adjacent area shall not be disturbed without a NYS Department of Environmental Conservation permit.]]
- 11.16 [Stabilization shall be adequate to prevent erosion located at the outlets of all pipes and paved/rip-rap channels.]
- 11.17 [Sediment shall be removed from sediment traps or sediment ponds whenever their design capacity has been reduced by fifty (50) percent.]
- 11.18 [Development should relate to site conditions and disturbance of steep slopes avoided. Grading should be minimized by utilizing existing topography whenever possible. Roads and driveways shall follow the natural topography to the greatest extent possible.]
- 11.19 [In areas of severe slopes (exceed 25 percent), land-disturbing activities are not permitted. A 25-foot buffer must be maintained between any disturbed area and the top of slopes 25 percent and greater.]
- 11.20 Maintenance Easement(s) - Prior to the issuance of any approval that has a stormwater management facility as one of the requirements, the applicant or developer must execute a maintenance easement agreement that shall be binding on all subsequent landowners served by the stormwater management facility. The easement shall provide for access to the facility at reasonable times for periodic inspection by the City of Troy to ensure that the facility is maintained in proper working condition to meet design standards and any other provisions established by this local law. The easement shall be recorded by the grantor in the office of the County Clerk after approval by the counsel for the City of Troy.

11.21 Maintenance Agreements - The City of Troy shall approve a formal maintenance agreement for stormwater management facilities binding on all subsequent landowners and recorded in the office of the County Clerk as a deed restriction on the property prior to final plan approval. The maintenance agreement shall be consistent with the terms and conditions of Schedule B of this local law entitled Sample Stormwater Control Facility Maintenance Agreement. The City of Troy, in lieu of a maintenance agreement, at its sole discretion may accept dedication of any existing or future stormwater management facility, provided such facility meets all the requirements of this local law and includes adequate and perpetual access and sufficient area, by easement or otherwise, for inspection and regular maintenance.

12 Section 12. Water Quality Standard

Any land development activity shall not result in:

- 12.1 An increase in turbidity that will cause a substantial visible contrast to natural conditions in surface waters of New York State;
- 12.2 [An increase in suspended, colloidal and settleable solids that will cause deposition or impair the waters for their best uses; or]
- 12.3 [Residue from oil and floating substances, nor visible oil film, or globules of grease.]

13 Section 13 Maintenance During Construction

- 13.1 The applicant or developer of the land development activity or their representative shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the applicant or developer to achieve compliance with the conditions of this local law. Sediment shall be removed from sediment traps or sediment ponds whenever their design capacity has been reduced by fifty (50) percent.

14 Section 14. Erosion and Sediment Control Inspection

14.1 The City Zoning Enforcement Officer or designated agent may require such inspections as necessary to determine compliance with this law and may either approve that portion of the work completed or notify the applicant wherein the work fails to comply with the requirements of this law and the SWPPP as approved. To obtain inspections, the applicant shall notify the Zoning Enforcement Officer or designated agent at least 48 hours before the following as required by the SWPPP:

- 14.1.1 Start of construction and initial installation of sediment and erosion controls
- 14.1.2 Installation of sediment and erosion measures as site clearing and grading progresses
- 14.1.3 Completion of site clearing
- 14.1.4 Completion of rough grading
- 14.1.5 Completion of final grading
- 14.1.6 Close of the seasonal land development activity
- 14.1.7 Completion of final landscaping
- 14.1.8 Successful establishment of landscaping in public areas

If any violations are found, the applicant and developer shall be notified in writing of the nature of the violation and the required corrective actions. Corrective actions may include the repair/restoration of offsite impacts. No further work shall be conducted except for site stabilization until any violations are corrected and all work previously completed has received approval by the City Zoning Enforcement Officer or designated agent.

- 14.2 For land development activities, the applicant shall have a qualified professional conduct an assessment of the site prior to the commencement of construction and certify in an inspection report that the appropriate erosion and sediment controls described in the SWPPP have been adequately installed or implemented to ensure overall preparedness of the site. Following the commencement of construction, site inspections shall be conducted by a qualified professional at least every seven (7) calendar days and within 24 hours of the end of a storm event 0.5 inches or greater. The purpose of such inspections will be to determine the overall effectiveness of the plan and the need for additional control measures. During each inspection, the licensed/certified professional shall record the following information:
- 14.2.1 On a site map, indicate the extent of all disturbed site areas and drainage pathways. Indicate site areas that are expected to undergo initial disturbance or significant site work within the next 14-day period;
 - 14.2.2 Indicate on a site map all areas of the site that have undergone temporary or permanent stabilization;
 - 14.2.3 Indicate all disturbed site areas that have not undergone active site work during the previous 14-day period;
 - 14.2.4 Inspect all sediment control practices and record the approximate degree of sediment accumulation as a percentage of the sediment storage volume;
 - 14.2.5 Inspect all erosion and sediment control practices and record all maintenance requirements such as verifying the integrity of barrier or diversion systems and containment systems. Identify any evidence of rill or gully erosion occurring on slopes and any loss of stabilizing vegetation or seeding/mulching. Document any excessive deposition of sediment or ponding water along barrier or diversion systems. Record the depth of sediment within containment structures, any erosion near outlet and overflow structures, and verify the ability of rock filters around perforated riser pipes to pass water; and
 - 14.2.6 All deficiencies that are identified with the implementation of the SWPPP.
- 14.3 A copy of the NOI and a brief description of the project shall be posted at the construction site in a prominent place for public viewing. A copy of the SWPPP shall be retained at the site of the land development activity during construction from the beginning of construction activities to the date of final stabilization. The SWPPP and inspection reports are public documents that the operator must make available for inspection, review and copying by any person within five (5) business days of the operator receiving a written request by such person to review the SWPPP and/or the inspection reports. Copying of documents will be done at the requester's expense.
- 14.4 The operator shall maintain a record of all inspection reports in a site logbook. The site log book shall be maintained on site and be made available to the City upon request. The operator shall post at the site, in a publicly accessible location, a summary of the site inspection activities on a monthly basis.

- 14.5 The applicant or developer or their representative shall be on site at all times when construction or grading activity takes place and shall inspect and document the effectiveness of all erosion and sediment control practices.
- 14.5 The Zoning Enforcement Officer, or designated agent, shall enter the property of the applicant as deemed necessary to make regular inspections to ensure the validity of the reports filed under subsection 14.3 above.

15 Section 15. Project Completion

15.1 Inspections of Stormwater Management Practices (SMP's)

The City Zoning Enforcement Officer or designated agent is responsible for conducting inspections of stormwater management practices (permanent water quantity/ quality improvement structures). All operators are required to submit "as built" plans certified by a professional engineer for any permanent stormwater management practices located on site after final stabilization.* The plan must show the final design specifications for all stormwater management facilities and must be certified by a professional engineer. Operators shall also provide the owner(s) of such structure(s) with a manual describing the operation and maintenance practices that will be necessary in order for the structure to function as designed. The operator must also certify that the permanent structure(s) have been constructed as described in the SWPPP. This certification can be accomplished by providing to the City a copy of the Notice of Termination (NOT) filed with the NYS DEC.

- 15.2 All certified "as built" plans, lands, structures, and/or appurtenances, to be dedicated to the City shall be reviewed, inspected and approved by the City Engineer or designated agent prior to City acceptance.

15.3 Notice of Termination (NOT)

Upon certification by the operators licensed/certified professional that a final site inspection has been conducted and that "final stabilization" has been accomplished and all Stormwater Management Practices have been constructed as described in the SWPPP the Operator shall complete and file an NOT as proscribed by the NYS DEC and file a copy with the City to notify them that they have complied with Section 14.1 and that the project is complete.

16 Section 16. Post Construction Activities

16.1 Maintenance after Construction

The owner or operator of permanent stormwater management practices installed in accordance with this law shall ensure they are operated and maintained to

*"Final Stabilization" means that all soil disturbing activities at the site have been completed and a uniform perennial vegetative cover with a density of eighty (80) percent has been established or equivalent stabilization measures (such as the use of mulches, or geotextile mats) have been employed on all unpaved areas and areas not covered by permanent structures.

achieve the goals of this law. Proper operation and maintenance also includes, at a minimum, the following:

- 16.1.1 A preventive/corrective maintenance program for all critical facilities and systems of treatment and control (or related appurtenances) which are installed or used by the owner or operator to achieve the goals of this law.
- 16.1.2 Written procedures for operation and maintenance and training new maintenance personnel.
- 16.1.3 Discharges from the SMPs shall not exceed design criteria or cause or contribute to water quality standard violations in accordance with Section 12.

16.2 Inspection of Stormwater Facilities after Project Completion

Inspection programs shall be established on any reasonable basis, including but not limited to: routine inspections; random inspections; inspections based upon complaints or other notice of possible violations; inspection of drainage basins or areas identified as higher than typical sources of sediment or other contaminants or pollutants; inspections of businesses or industries of a type associated with higher than usual discharges of contaminants or pollutants or with discharges of a type which are more likely than the typical discharge to cause violations of state or federal water or sediment quality standards or the SPDES stormwater permit; and joint inspections with other agencies inspecting under environmental or safety laws. Inspections may include, but are not limited to: reviewing maintenance and repair records; sampling discharges, surface water, groundwater, and material or water in drainage facilities; and evaluating the condition of drainage control facilities and other stormwater management practices.

16.3 Submission of Reports

The City of Troy Stormwater Management Officer may require monitoring and reporting from entities subject to this law as are necessary to determine compliance with this law.

16.4 Right-of-Entry for Inspection

When any new stormwater management facility is installed on private property or when any new connection is made between private property and the public storm water system, the landowner shall grant to the City of Troy the right to enter the property at reasonable times and in a reasonable manner for the purpose of inspection as specified in Section 16.2.

17 Section 17. Performance Guarantee

17.1 Construction Completion Guarantee

The applicant or developer may be required to provide, prior to construction, a performance bond, cash escrow, or irrevocable letter of credit, from an appropriate financial or surety institution which guarantees satisfactory completion of the

project and names the City of Troy as the beneficiary. The security shall be in an amount determined by the City of Troy based on submission of final design plans, with reference to actual construction and landscaping costs. The performance guarantee shall remain in force until the surety is released from liability by the City of Troy, provided that such period shall not be less than one year from the date of final acceptance or such other certification that the facilities have been constructed in accordance with the approved plans and specifications and that a one year inspection has been conducted and the facilities have been found to be acceptable to the City. Per annum interest on cash escrow deposits shall be reinvested in the account until the surety is released from liability.

17.2 Maintenance Guarantee

Where stormwater management and erosion and sediment control facilities are to be operated and maintained by the developer or by a corporation that owns or manages a commercial or industrial facility, the developer, prior to construction, may be required to provide the City of Troy with an irrevocable letter of credit from an approved financial institution or surety to ensure proper operation and maintenance of all stormwater management and erosion control facilities both during and after construction, and until the facilities are removed from operation. If the developer or landowner fails to properly operate and maintain stormwater management and erosion control facilities, the City may, upon notification, draw upon the account to cover the costs of proper operation and maintenance, including engineering and inspection costs.

17.3 Record Keeping

The City of Troy may require entities subject to this law to maintain records demonstrating compliance with this law.

18 Section 18. Retention of Licensed/Certified Professional; Payment

- 18.1 The responsible board or municipal official is hereby authorized to retain Licensed/Certified Professionals as are determined to be necessary to carry out the review of a SWPPP or to make regular or final inspections of all control measures, lands, structures, and/or appurtenances, to be dedicated to the City in accordance with the approved plan.
- 18.2 Payment for the services of such professionals is to be made from funds deposited by the applicant with the City in escrow accounts for such purposes.
- 18.3 It shall be the responsibility of the applicant to submit to the City certified check(s) in amounts equal to the estimate of the Licensed/Certified Professional for the cost of services to be rendered. Estimates shall reflect reasonable costs at prevailing rates. The City shall make payments to said professional for services rendered to it upon acceptance by the City of said service.

19 Section 19. Enforcement and Penalties

19.1 Notice of Violation.

The operator and all contractors and subcontractors must comply with all conditions of a SWPPP submitted pursuant to this local law. In the event that the City determines that a land development activity is not being carried out in accordance with the requirements of this local law, the Zoning Officer may issue a written notice of violation to the operator/landowner, applicant and all contractors/subcontractors subject to the provisions of this local law. The notice of violation shall contain:

- The name and address of the operator/landowner, developer, or applicant;
- The address of the site or a description of the building, structure or land upon which the violation is occurring;
- A statement specifying the nature of the violation;
- A description of the remedial measures necessary to bring the land development activity into compliance with this local law and a time schedule for the completion of such remedial action;
- A statement of the penalty or penalties that can be assessed against the person to whom the notice of violation is directed;

Within fifteen (15) days of notification of violation (or as otherwise provided by the City) the violator shall take the remedial measures necessary to bring the land development activity into compliance with this local law.

19.2 Stop Work Order.

The City Zoning Enforcement Officer may issue a stop work order for violation of this local law. Persons receiving a stop work order shall be required to halt all land development activities, except those activities that address the violation(s) identified in the stop work order. The stop work order shall be in effect until the City confirms that the land development activity is in compliance and the violation has been satisfactorily addressed. Failure to address a stop work order in a timely manner may result in civil, criminal, and/or monetary penalties in accordance with this local law.

19.3 Violations

The City of Troy may require entities subject to this law to maintain records demonstrating compliance with this law.

19.4 Penalties.

Any person violating any of the provisions of this ordinance shall be deemed guilty of a misdemeanor and each day during which any violation of any of the provisions of this ordinance is committed, continued, or permitted, shall constitute a separate offense. Upon conviction of any such violation, such person, partnership, or corporation shall be punished by a fine of not more than \$250 for each offense. In addition to any other penalty authorized by this section, any person, partnership, or corporation convicted of violating any of the provisions of this local law shall be

required to bear the expense of such restoration. To the extent that the noncompliance with this local law constitutes a violation of the Clean Water Act and the Environmental Conservation Law, there may be substantial criminal, civil, and administrative penalties depending upon the nature and degree of the offense.

19.5 Withholding Certificate of Occupancy.

If any building or land development activity is installed or conducted in violation of this local law the City Zoning Enforcement Officer may prevent the occupancy of said building or land.

19.6 Restoration of Lands

Any violator may be required to restore land to its undisturbed condition. In the event that restoration is not undertaken within a reasonable time after notice, the City of Troy may take necessary corrective action, the cost of which shall become a lien upon the property until paid.

20 Section 20. Separability

20.1 The provisions and sections of this local law shall be deemed to be separable, and the invalidity of any portion of this local law shall not affect the validity of the remainder.

21 Section 21. Adotion of Law

This law shall be in full force and effect __ days after its final passage and adoption. All prior laws and parts of law in conflict with this law are hereby repealed.

PASSED AND ADOPTED this 10th day of April, 2008, by the following vote:

Ayes: 9
Noes: 0
Abstain: 0