

**INITIAL STORMWATER MANAGEMENT PLAN
FOR THE TOWN OF NORTH SALEM, WESTCHESTER COUNTY, NEW YORK**

**In Accordance with the
New York State Department of Environmental Conservation (NYSDEC)
SPDES General Permit for Storm Water Discharges from
Small Municipal Separate Storm Sewer Systems (MS4s)**

Introduction

There are many practices, policies, procedures and regulations already in effect in the Town of North Salem, that provide for consideration, review and proper management of stormwater. The first part of this Initial Stormwater Management Plan will provide an overview of measures already in place in the Town to address control and management of stormwater and related effects of land disturbance and development, erosion, sedimentation and potential pollution of surface waters. These existing practices, procedures and regulations correspond to construction site and post-construction stormwater runoff control and also result in the prevention of increases in stormwater runoff in the Town of North Salem.

Several of the Town's existing laws and regulations address the management of, either directly or indirectly, potential sources of stormwater runoff and possible non-point sources of pollution. An overview of these Chapters of the Code of the Town of North Salem (Chapters 37, 48, 89, 100, 107, 115, 137, 189, 195, 200, 250, A263 and A267) is provided below.

Additionally, the review of nearly all types of land development and disturbance involves some form of environmental and/or engineering review. The Town of North Salem Town Board, Planning Board and Building Department, in conducting their review of proposed development and construction, proceed in a detailed and consultative manner. These reviews address many aspects of environmental review including stormwater runoff, and erosion and sedimentation effects, which is discussed further below.

Given the extensive review procedures already in place in the Town of North Salem, the Town does not anticipate the need for more than one new set of regulations as will be discussed below. The Town has already begun reworking its existing tree-removal and excavation law (Code Chapter 189) to incorporate extensive disturbance of land that is not regulated under subdivision or site plan review and to regulate disturbance on steep slopes. The proposed amendment of Chapter 189 is also addressed below.

Town of North Salem's Existing Laws and Regulations

There are several sets of Town of North Salem regulations in place that directly or indirectly serve to address potential sources of or effects on stormwater runoff, erosion and sedimentation effects and possible non-point sources of pollution and more generally the natural resource integrity of the Town:

- Code Chapter 100, Flood Damage Prevention regulates the alteration, filling and disturbance and development in flood hazard areas;
- The regulation of activities in or near locally-designated freshwater wetlands seeks to prevent disturbances in controlled areas (wetlands, watercourses and their corresponding 100-foot buffer area) as set forth in the Code of the Town of North Salem, Chapter 107;
- Code Chapter 189, regarding excavation and tree removal, in part prevents the degradation of land by unregulated and unmitigated tree removal and excavation and incorporates grading and drainage, erosion and sedimentation controls which preserve the quality of land and prevent the degradation of drainageways, streams and waterbodies, generally;
- Code Chapter 195, Streets and Sidewalks, regulates streets (maintenance and construction), sidewalks and driveways, including required drainage systems and stabilization of disturbed areas and slopes;
- The regulations for the subdivision of land, in Code Chapter 200, include requirements and standards for consideration of natural features, stone walls, extent of disturbance, grading or tree removal, storm drainage, erosion and sedimentation control, tree planting and alternate design standards such as narrower roads and pervious (gravel) surfaces and the need for specified construction programs;
- Furthermore, Code Chapter 200 recognizes the need for easements for protection of environmentally sensitive lands, such as wetlands, watercourses, steep slopes, and flood plains;
- Code Chapter 250, the Zoning Ordinance, includes provisions for average density/cluster development, flexible bulk standards, low-density and low-coverage zoning, drainage, landscaping, erosion and sedimentation control, management of liquid and solid wastes, shared/reduced parking areas and buffering. Additionally, supplemental requirements for certain uses address the storage or management of vehicles, wastes and other substances; and
- Code Chapter A263 provides regulations for the implementation of conservation easements, including provisions for preservation, inspection and restoration, in the event of disturbance; and
- Finally, Code Chapter A267, Site Development Plan Rules and Regulations, incorporates consideration of roads, individual site access and parking, grading, drainage, erosion and sedimentation control, landscaping and identification of existing natural site features.

Several other North Salem Code Chapters deal with stormwater runoff management less specifically, but contribute to the level at which North Salem manages applications, building, development, and other ongoing activities of its residents that could indirectly affect surface waters. Some of these pertain to the activities of individual properties. Code Chapter 37, the Application Processing Restrictive Law, prevents applicants from proceeding with any applications in the event there is a violation of a local law or ordinance. For example, an application for subdivision or site plan cannot proceed if there is an existing violation of the wetland law.

Code Chapter 48, Blasting and Explosives, deals with the administration of blasting permits, but also regulates transport of explosives in the Town and requires site restoration (debris removal, control of stormwater, erosion and restoration of vegetation). Code Chapter 89, Fill, regulates the importation of fill, the type of fill and addresses erosion and sedimentation control. Code

Chapter 115, Garbage, Rubbish and Refuse, regulates proper collection and disposal of solid waste, including proper operation and maintenance of trucks. Littering is regulated by Code Chapter 137, including prohibition of littering and storage of certain materials on private property.

However, it should be noted that farms or agricultural operations might be exempted from certain review processes. For example, an existing farm or agricultural operation in Westchester County's Agricultural District may be exempted from site development plan review before the Planning Board based on a determination by the New York State Department of Agriculture and Markets. Since over 4,000 acres of the land area in the Town of North Salem is located within the Agricultural District, this exemption may effect a significant area of the Town.

Existing Review Policies and Procedures for Land Development and Construction

Building department reviews:

An application for a building permit in the Town of North Salem is given a detailed review. Sometimes the building department's review will involve directing applicants to apply for other permits under the other Code Chapters outlined above, such as for blasting, filling, wetlands or tree removal. Certain applications for building permits are referred for additional review by the Town's Consulting Engineer. For example, a new single-family residence on a residential lot or a renovation of an existing single-family home may require review by the engineer of the grading, driveway, drainage, erosion and sedimentation control. Blasting and fill permits are also reviewed by the Town Engineer.

Individual wetland permits are reviewed by the Town's Wetlands Inspector and may be referred to the Planning Board under certain circumstances. Tree removal or excavation permits must be reviewed by the Planning Board and may also be reviewed by the Town's Consulting Engineer.

As noted above, applications for blasting, filling, wetlands and tree removal may be subject to requirements and standards related to grading, drainage, erosion and sedimentation control, all of which can be protective of surface water resources.

Review of Land Development (Conditional/Special Permits, Subdivision, Site Plan):

All land development in the Town of North Salem, that is larger in scope than an individual building permit, must comply with pertinent chapters and sections of the Code of the Town of North Salem, including three primary Code chapters:

- Chapter 250, the Zoning Ordinance; and
- Chapter 200, Subdivision of Land; or
- Chapter A267, Site Development Plan Rules and Regulations.

Additionally, such land development may also involve review under Code Chapter 107, Freshwater Wetlands concurrently with review procedures under Code Chapters 250 (zoning),

200 (subdivision) and A267 (site development plan). Most applications for land development are also subject to environmental review under NY SEQRA.

The Zoning Ordinance includes general provisions regarding uses, density, bulk and coverage and specific requirements about such amenities as parking, drainage, landscaping, erosion and sedimentation control and buffering. These are key components of the types and intensities of uses that are developed and the extent of resulting impervious and pervious surfaces. Conditional use approvals by the Planning Board and Special Permit reviews by the Town Board and Zoning Board of appeals provide another level of review specific to particular uses. The Zoning Ordinance includes supplemental requirements for specific types of development, some of which are related to controlling coverage, dust, pollutants, drainage, erosion and sedimentation.

All land development, with the exception of the construction of a single-family detached residence and certain alterations and additions thereto, must comply with Chapter 200, Subdivision of Land or Chapter A267, Site Development Plan Regulations. Both the regulations for the Subdivision of Land (Chapter 200) and Site Development Plan (Chapter A267) incorporate consideration of roads, individual site access and parking, grading, drainage, erosion and sedimentation control, landscaping and identification of existing natural and manmade site features in development applications.

Additionally, land development throughout the Town of North Salem, is subject to review by numerous other agencies. Several of the Town, County, State and Federal agencies are involved in the review of development in the Town depending on the characteristics of each development site and the type of development proposed. Typically, when an application is complete, it is circulated to agencies that may be involved or interested, in accordance with SEQRA. By circulating to agencies early in the review process, the Town and the Applicant may obtain specific commentary prior to final review of the development.

The agencies that may be involved in the review of each application for an approval, a permit or for a referral or commentary may include the Town's Consulting Planner, Wetlands Inspector, Consulting Engineer, the Westchester County Department of Health (WCDOH), the New York State Department of Health (NYSDOH) and the New York City Department of Environmental Protection (NYCDEP), Westchester County Planning Board (WCPB), Westchester County Soil and Water Conservation District (WCSWCD), New York State Department of Environmental Conservation (NYSDEC), Westchester County Department of Public Works (WCDPW), New York State Department of Transportation (NYSDOT) and the United States Army Corps of Engineers (ACOE). These agencies are either directly concerned with stormwater management and potential erosion and sedimentation effects of development or must comply with related standards in their review.

It should be noted that 98% of the land area in the Town of North Salem falls within the New York City Water Supply Watershed area. Therefore, compliance with the *Rules and Regulations for the Protection from Contamination, Degradation and Pollution of the New York City Water*

Supply and its Sources, also known as the NYCDEP Regulations, will be a concern where any development occurs in the Town of North Salem. All land development applications reviewed by the Town Board and Planning Board are referred to the NYCDEP for review.

Development of subdivisions and roads:

During the review of proposed subdivisions, the Town of North Salem Planning Board, as a matter of policy, is mindful of environmentally sensitive development practices as outlined below:

- The placement of structures or significant clearing or disturbance on the tops or crests of hills and mountains or within visually prominent landscape features such as in open field areas is discouraged;
- Gravel or dirt roads or roads constructed using "rural" specifications are permitted, where appropriate.
- The use of existing driveways, old farm or wood roads, or other previously disturbed or cleared areas to create access for new development is encouraged.
- Development design that results in the preservation of fields, meadows, stone walls, hedgerows and wooded areas and limits the alteration of existing topography to the maximum extent practicable is recommended.

Also, the Town of North Salem Planning Board regularly considers whether development of a local public road is necessary or is desired by the Town. Each subdivision is considered on a case-by-case basis taking into account many factors in determining whether to require a public road constructed to local street specifications versus a private road constructed to specifications permitted for local streets or modified specifications for private/local streets. In certain cases, a shared driveway is the most appropriate design for access to lots in a proposed small-scale subdivision. Among the factors that the Planning Board uses to determine the proper form of improved access to lots in a proposed subdivision are:

- The number of proposed lots or the combined number of existing and proposed lots;
- The length, configuration, existing topography and potential grade of a proposed road or shared access;
- The terrain and environmental characteristics of the land being subdivided, the extent of proposed land disturbance and potential stormwater runoff effects such as erosion and sedimentation;
- The watershed regulations of the New York City Department of Environmental Protection (NYCDEP); and
- The surrounding roadway network, including the street from which the proposed subdivision will have access.

Private roads are typically created in subdivisions with fewer lots (3 to 5 lots). Depending on the terrain of the proposed subdivision, the Planning Board may require that the proposed road be built to private or local road specifications. The Planning Board also has the discretion, in accordance with the code of the Town of North Salem Chapter 200, Subdivision of Land, to

modify the standards in appropriate circumstances and in situations where land disturbance can be minimized.

Ongoing Review of Proposed Land Disturbance Law

The Town of North Salem Planning Board has initiated the review and revision of the existing Code Chapter 189, Sand and Gravel Excavation and Tree Removal, to incorporate concerns about steep slopes and unregulated land disturbance. Code Chapter 189 will be amended to create a set of land disturbance regulations for clearing, site preparation and construction of access on properties to more broadly address development on steeply sloped areas, excavation and tree removal. The revision of Code Chapter 189 will provide specific standards for development on hilly and mountainous areas, continued preservation of wooded areas and prevention of erosion and sedimentation effects related to land clearing and earthmoving activities.

Additional Planning Efforts related to Stormwater Management

There are additional planning efforts that the Town has and will continue to engage in that are generally or specifically related to stormwater management. Since the Town of North Salem falls within the New York City Water Supply Watershed area, many of these practices and regulations are reinforced by individual project review under the NYCDEP Regulations. Similarly, the Town has been involved in regional planning efforts orchestrated by the Westchester County Department of Planning related to the Croton Watershed area as part of the New York City watershed. A few of these efforts are outlined below.

The Town of North Salem has been working on a Draft Comprehensive Plan Update (Draft CPU). Further study, review, revision and eventually SEQR and public review will be involved before the Draft CPU will be ready for adoption. However, certain objectives stated in the draft document may be implemented prior to any review of the Draft CPU. One example of this is the amendment of Code Chapter 189 to create a set of land disturbance regulations.

Agricultural Operations - In the Draft CPU, the Town recognizes the importance of the agricultural operations located within its boundaries, as they are generally low building coverage uses. Farms of all varieties and the associated environmental and landscape preservation values of agricultural uses are encouraged and protected. Since farm operations retain lands as primarily open space, their continued viability prevents development of these lands for more intensive, higher-coverage uses. The zoning provisions for agricultural uses are now being re-evaluated and amended, as necessary, to support continued and expanded farm development.

Open Space - A primary goal of the Town's ongoing planning and land development reviews is to continue to preserve and protect the integrity of existing open space areas and to encourage the preservation of additional, desirable open lands. A primary strategy for the Town will be the identification of areas of Town where open space needs to be preserved or set aside to accomplish the following:

- To maintain and preserve the rural, visual and scenic character of the Town;
- To protect environmentally sensitive lands and scenic topographic features;
- To provide trails for recreational uses including walking, hiking and horseback riding;
- To preserve and enhance animal and plant habitats; and
- As a secondary effect, to protect the watershed of waterways and waterbodies in the Town.

To that end, the Town of North Salem has formed an Open Space Committee (OSC), consisting of members representing all areas of the Town and groups that have interests and concerns about open space. The OSC was formed partly as a result of a bond passed by Town residents for funds to be used to identify, acquire and/or to maintain designated open space lands.

Review of Existing Environmental Regulations - The Code of the Town of North Salem, Chapter 107, Freshwater Wetlands, may reviewed to determine whether amendments are necessary for facilitation of small-scale applications. Similarly, during the review and revision of Code Chapter 189, to create a set of land disturbance regulations (discussed above), facilitation of small-scale applications will be considered. Since many of the applications that are filed in the Town are the result of violations, it is possible that property owners are either not aware of the regulations or are reluctant to make applications that they believe will involve a cumbersome review process for relatively minor improvements in their land.

The Town recognizes that public education regarding regulations pertaining to natural resource protection may improve knowledge of activities that require an application and thus reduce the number of violations. Application packets for these two sets of regulations contain a copy of the pertinent Code Chapter for use by Applicants and their representatives. If the regulations are amended to make the review process simpler for property owners, it is believed that residents are more likely to file applications, rather than risk a potential violation.

The review of local regulations and ordinances that pertain to natural resources will involve consultation with the New York City Department of Environmental Protection (NYCDEP), the Westchester County Planning Department (WCPD), the Town=s Consulting Engineer, Wetlands Inspector, Planning and Building Departments and other agencies.

Review of Applications for Land Development - During the review of applications, the Planning Board should incorporate open space in the design of new development wherever possible. Development reviews should encourage alternative design patterns, such as denser clustering of buildings, to create larger, contiguous, open space land areas in all zoning districts. The creation of open space or the donation of land to private land trusts or foundations should be encouraged, whenever it is an appropriate consideration.

Although the Town of North Salem Code includes provisions to protect town character, the Planning Board, Town Board and Zoning Board of Appeals and other reviewing agencies should, whenever possible, encourage the appropriate design of new development and rehabilitation of existing developments in consideration of the following development guidelines:

- Request a design or layout, such as a Acluster@ design, wherein buildings and smaller lots can be appropriately located in closer proximity to provide larger open, undisturbed land areas;
- Discourage the placement of structures or significant clearing or disturbance on the tops or crests of hills and mountains, or on steeply sloped areas that may have a shallow depth of soil cover over bedrock or may be prone to erosion;
- Permit gravel or dirt roads or roads constructed using Arural@specifications, where appropriate;
- Encourage the use of existing driveways, old farm or wood roads, or other previously disturbed or cleared areas to create access for new development; and
- Recommend development design that results in the preservation of fields, meadows, stone walls, hedgerows and wooded areas and limits the alteration of existing topography to the maximum extent practicable.

Proposed Stormwater Management Practices

The Notice of Intent (NOI) for Coverage under an SPDES General Permit, and the descriptive text attached thereto, identifies management practices and measurable goals for the Town of North Salem. Some additional detail and clarification is needed to further define the Town's proposed management of stormwater under the SPDES General Permit, which is provided below. The numbering of the subsections below corresponds to the numbering on the NOI form.

D.1 Public Education and Outreach

The Town of North Salem will conduct an ongoing public education and outreach program to make the public aware of its stormwater management planning. The education and outreach program will consist of a few key components: information and links on the Town's website, printed material and an annual public meeting.

The Town's website will be updated periodically to provide educational information or links to useful information for the public about current daily household practices, which contribute pollutants to stormwater discharges. Proper lawn and garden care and disposal of household hazardous wastes will be addressed. The Town intends to reach those town residents who access the Town's Website with information, which will raise their awareness of stormwater pollutants issues. The website will also include links to the Town's local laws, ordinances and regulations.

Printed material will be mailed town wide, which will inform residents of both local and New York State stormwater laws and regulations. Residents will find information about the Town's website in the printed information. This material will address proper lawn and garden care, illegal discharges and improper disposal of waste, expected protection of steep slopes and wetlands, excessive tree and brush removal and the hazards of erosion and destruction of habitat.

The Town will also provide such printed material at Town offices, the North Salem Free Library and possibly other locations such as local schools and the post offices.

An Annual Event will be held during which the Town's Stormwater Management Plan (SWMP) and any subsequent revisions will be presented to the public. The Annual Report on stormwater management will also be presented each year. The Town will contact the School District to determine the most appropriate way for students to participate and to plan a presentation to the students. Students will be encouraged to attend the Town's Annual Event and may be awarded extra credit by writing a report on it.

To address outreach to land developers, a Construction Site BMP's pamphlet will be created and distributed to all applicants and their representatives by the Planning and Building Departments. This may involve examination and reference to documents provided by New York State such as the New York State Stormwater Management Design Manual, Reducing the Impacts of Runoff from New Development, and New York State Standards and Specifications for Erosion and Sediment Control. Also, the town may create an Email Pamphlet for applicants and their representatives that use email, which will include links for obtaining the above noted documents.

D.2 Public Involvement/Participation

As noted above, an Annual Event will be held during which the Town's Stormwater Management Plan and Annual Report will be presented to the public. The public will be properly notified and the SWMP and Annual Report will be available for review prior to the Annual Event. Notification will be in the local newspaper and posted at specified locations and the documents will be available at Town Offices, the North Salem Free Library and on the Town's website. Additionally information will be presented regarding Proper lawn and garden care and disposal of household hazardous wastes, the Town's current practices and the implementation of Best Management Practices (BMPs) related to the SPDES General Permit. This will be followed by discussion and public commentary. It is hoped that the public may also provide information about the location of specific areas of concern. A comment period following the meeting will allow residents to submit written commentary.

The Stormwater Management Plan will be on file continuously and available for public perusal at Town offices and the North Salem Free Library. Local, County and State agencies will be provided a copy of the plan to make them aware of the Town's existing and proposed management practices. The main contact person will be the Town Supervisor and additional contacts will be the Town departments involved with various aspects of the SWMP such as the Planning, Building and Highway Departments.

Public review of plans for a proposed Stormwater Management Plan will take place at the Annual Event, as described above. Public review will be required for the creation or amendment of any law or ordinance to define and enforce specified portions of the Plan and will involve legally noticed public hearings. The public will be encouraged to critique and assist in the development of the any local laws or ordinances.

As discussed in the Introduction of this plan, Code Chapter 189 is already being considered for amendment to address land disturbance generally. The Town will also examine other existing laws and regulations to assess whether amendments are needed to address improved stormwater management. Alternatively, the town may consider creation of a separate set of stormwater management regulations. In either case, amendment of or newly proposed regulations will be subject to SEQR and public review. The Town will make draft laws or regulations and any related documents available to the public at Town offices as is currently the practice of the Town.

As noted above, students will be encouraged to attend the Town's Annual Event and may be awarded extra credit by writing a report on it. The schools will be requested to collaborate with the Town in the creation of a Student Participation Program. One of the activities would be attending the Town's Annual Event and writing a report. Another activity may involve an extra credit project involving the creation of a "Stormwater" play or video program to be shown on Public Access Cable, developed and produced by the students.

The Town has hired a part-time employee to document and inspect existing conservation easements. As additional easements are obtained, those will also be addressed. The conservation easement inspector may be assisted by volunteers in documenting and inspecting conservation easements.

D.3 Illicit Discharge Detection and Elimination

The mapping of municipal stormwater systems, catch basins, outfalls and other clearly identifiable stormwater management improvements will be done by the Highway Superintendent, including a determination of illicit discharges, which may be entering the system. As a result of mapping, a determination will be made about the final destination of stormwater and other materials such as sediment. The Town's Highway Department will expand its practice of inspecting stormwater systems and related improvements to include documentation of illicit discharges. A report will be prepared to attempt to identify the nature of any illicit discharges and will specify which if any reach the waters of the United States via direct, unfiltered discharge. The Town intends to ultimately work towards rectifying situations under their jurisdiction and implement any necessary remediation.

The Town will consider the creation of a position of Environmental Inspector whose role will be partly to identify illicit stormwater system connections and discharges. This individual will investigate the information provided by the Highway Superintendent as well as information provided by complainants. In addition, the Inspector will initiate investigations based on observations townwide.

The Town will inform the public, employees and businesses of the hazards from illicit discharges. Information and links to additional information will be provided on the Town's website. Also printed materials will be available at Town Office's.

An Annual Report will be presented to the Town Board about the mapping of stormwater

systems, catch basins and stormwater management improvements and citing incidents of illicit stormwater system connections and discharges and their disposition. An investigation base will be created, which can be utilized for future reference in an Annual Audit of illicit discharges. Non-stormwater discharges as identified in Permit No. GP-02-02 will be exempted provided that they are determined not to be substantial contributors of pollutants.

Illegal dumping will be noted by the Environmental Inspector and enforcement undertaken in concert with the Building Department. The public will be advised via the website and annual mailing of the proper method of disposal of household chemicals, pesticides, motor oil and propane with drop-off locations when available. A summary of any local law or ordinance, which addresses illegal dumping, will be included. It is expected that reporting of illegal dumping will occur via a combination of the inspections and citizen complaints.

As discussed above, the Town's Code Chapter 89, Fill, regulates the importation of fill, the type of fill and addresses erosion and sedimentation control. Additionally, Code Chapter 250, the Zoning Ordinance, includes basic provisions for the management of liquid and solid wastes.

D.4 Construction Site Stormwater Runoff Control

The Introduction of this plan provides an extensive overview of how there are many practices, policies, procedures and regulations already in effect in the Town of North Salem, that provide for consideration, review and proper management of stormwater.

Most development applications in the Town of North Salem require review of site plans, which are typically construction plans that include grading, drainage, erosion and sedimentation control and landscaping for projects involving land disturbance. Applications before the Town Board, the Planning Board and the Zoning Board of Appeals involve environmental review and public hearings. Applications are available to the public for review and commentary may be provided at the hearing or submitted in writing.

Applications to the Building Department require construction plans as well, however, public hearings are not required. The public may view applications on file at the Building Department. Most Building Permits involve sites that were previously subject to subdivision, site development plan or other similar review that involves a public hearing. The Building Inspector must review construction to see that it conforms to approved plans as part of existing site inspection practices.

As discussed therein, Code Chapter 189 is already being considered for amendment to address land disturbance generally. The Town will also examine other existing laws and regulations to assess whether amendments are needed to address improved stormwater management. Alternatively, the town may consider creation of a separate set of stormwater management regulations.

Existing laws and regulations will be reviewed and updated to ensure that disturbance of one acre or more, and where required, less than one acre, are properly regulated to protect water

quality. Measures shall be sufficient to ensure that pollutant reduction in stormwater runoff is accomplished to the greatest degree practicable. The laws and regulations will be examined with regard to inspections for the consideration of water quality impacts and consistency with accepted standards for sedimentation and erosion control, waste control, particularly addressing disposal of building materials, concrete truck washout, chemicals, litter and sanitary waste.

Conformance with the town's existing Fill Law will prevent the presence of additional pollutants. Education and training measures for construction site operators will be provided by town personnel. Regulatory mechanisms that include sanctions as well as enforcement will be included in any pertaining Ordinance.

When the Planning Board reviews applications for subdivision, site plan, tree removal or wetland permits, certain grading, drainage, erosion and sedimentation controls and landscaping measures are required. Recommendations for certain measures are determined on a case-by-case basis in consultation with the Town's Director of Planning, Planning Consultant, Consulting Engineer, Wetlands Inspector and Conservation Advisory Commission and other local, county, regional and state agencies. A site's topography, soils, location, vegetation, the presence of wetlands and watercourses, the type and magnitude of development and the extent of pervious and impervious surfaces are some of the factors that result in determining the requirement for certain measures or improvements.

The Planning Board frequently requires conservation easements and development envelopes when reviewing subdivisions. Conservation easements are required in accordance with the subdivision regulations to protect wetlands, streams, other waterbodies, woodlands and other sensitive natural features. Similarly, and often in concert with conservation easements, the Planning Board will require the establishment of development envelopes. These are areas that are delineated on individual lots beyond which disturbance is not permitted. Without the development envelopes, property owners may clear, disturb and build on areas of the lot as long as they are within the zoning setback lines and as long as they comply with other regulations such as the wetlands and tree removal laws. A development envelope is a boundary recorded on a plat beyond which development cannot go even if otherwise permitted by the Town's zoning and other regulations. It is viewed by the Town as a way of limiting disturbance and clearing during review of subdivisions, rather than allowing such matters to be determined by individual lot owners. Since the development envelopes are recorded on the plat, the only way to amend same is to apply for an amended subdivision.

Accordingly, the following construction site stormwater runoff control measures may be recommended: check dams, construction entrances, construction sequencing, dust control, geotextiles, grass lined or riprap channels (or swales), land grading, mulching, permanent seeding, preserving natural vegetation, riprap, sediment filters and chambers, sediment traps, sediment basins, silt fence, storm drain inlet protection, and vegetated buffers. Other additional measures may be recommended. Most of these measures are intended to be permanent improvements. Temporary measures are labeled on the plans. Appropriate notation and specifications indicate how these measures are to be implemented and in what order. Town officials, consultants and Applicant Representatives will be required to obtain copies of the following guidebooks that are available from the NYSDEC: New York State Stormwater

Management Design Manual; and New York State Standards and Specifications for Erosion and Sediment Control.

Single site development will require a multi-step Engineer Inspection program coordinated with the Building Inspector on all single unit construction, unless there is no land disturbance. Inspections are to assure that all erosion and silt fence requirements are in place and maintained, and that all work follows site plan as approved by the Building Department and any other plans approved by the Planning Board that pertain to the site. Inspections to be paid through an applicant's escrow:

- (a) Engineer will review application and site plan and provide written comments.
- (b) Engineer will hold pre-construction site inspection with the Contractor and Owner.
- (c) Engineer will submit a site plan sign-off memorandum to the Building Inspector and recommend issuance of an erosion control, clearing and grubbing construction permit by the Building Inspector.
- (d) Engineer will perform an inspection of the site to insure that erosion control measures have been installed pursuant to the approved plans at which time he can sign-off for the issuance of a driveway construction permit and a house foundation permit by the Building Inspector.
- (e) Engineer will inspect the site for compliance with the approved plans and the proper maintenance of erosion control measures, site rough grading and drainage.
- (f) Engineer will issue a written recommendation to the Building Inspector for the issuance of a framing permit by the Building Inspector.
- (g) Engineer will perform a final inspection of the site for compliance with the approved plans, and will submit a final work sign-off memorandum to the Building Inspector and recommend the issuance of a Certificate of Occupancy.

Those measures, which are already in effect, will continue. Additional items, described above, will be considered by the Town Board for incorporation into existing local laws or regulations. Alternatively, the town may consider creation of a separate set of stormwater management regulations.

D.5 Post-Construction Stormwater Management

As per the section above, Construction Site Stormwater Runoff Control, when the Planning Board reviews applications for subdivision, site plan, tree removal or wetland permits, certain grading, drainage, erosion and sedimentation controls and landscaping measures are required. Accordingly, the following post construction site stormwater runoff control measures may be recommended: catch basins, conservation easements, dry extended detention ponds, eliminating

curbs and gutters, geotextiles, grass lined or riprap channels (or swales), infiltration basins, land grading, narrower residential streets, open space design, permanent seeding, preserving natural vegetation, riprap, sediment filters and chambers, sediment traps, sediment basins, vegetated buffers and wet ponds. Other additional measures may be recommended such as landscaping and using gravel surfaces for driveways, roads and parking areas, where appropriate. Most of these measures are intended to be permanent improvements. Temporary measures are labeled on the plans. Appropriate notation and specifications indicate how these measures are to be implemented and maintained.

In order to properly address improved management of both construction and post construction stormwater runoff, the Town will examine its existing laws and regulations to determine whether they can be amended or whether a new law or set of regulations will be required. The Town's existing site development plan and subdivision regulations and other development regulations address grading, drainage, erosion and sedimentation control, landscaping, inspections and environmental monitoring to some degree. The language therein may need to be upgraded, however, and should make reference to accepted guidebooks regarding stormwater management, erosion and sedimentation control and best management practices. Town officials, consultants and Applicant Representatives will be required to obtain copies of the following guidebooks that are available from the NYSDEC: New York State Stormwater Management Design Manual; and New York State Standards and Specifications for Erosion and Sediment Control.

An Environmental Inspector will be employed to monitor post-construction stormwater runoff on new development and redevelopment. Existing laws and regulations will be reviewed or a new law will be adopted to require that structural and non-structural management practices continue to reduce the discharge of pollutants to the maximum extent practicable on projects of one acre or more and less than one acre where required to protect water quality. Enforcement and penalties will be addressed in amended laws or a newly adopted law or regulations. The Environmental Inspector will generate reports that will demonstrate the level of compliance and enforcement actions will be taken as identified in the written report.

D.6 Pollution Prevention/Good Housekeeping for Municipal Operations

Existing Best Management Practices will be continued and enhanced where possible to reduce and prevent the discharge of pollutants to the maximum extent practicable in conducting municipal activities related to operation and maintenance. The Highway Superintendent will report to the Town Board regarding conformance with New York State standards of operation. The report will also address stormwater system maintenance and cleaning, fleet and building maintenance, salt and sand storage and loading, street cleaning and parks, roadway, bridge and right-of-way maintenance. The ongoing training and safety program for staff and staff meetings (held once per month) will also be continued and will be expanded to address pollution prevention.

The Town of North Salem Highway Department has several management practices in place, which are listed on the NOI Form. For example, streets are cleaned regularly, including all Town roads, except dirt roads, and the Croton Falls municipal parking area. Street cleaning

occurs as often as needed, or approximately 8 to 10 times per year. The Town of North Salem cleans catch basins and storm drain systems in Town roads and the municipal parking area as often as needed based on observations by Highway Department personnel during regular maintenance runs. The Department may also receive calls about storm drain systems. The actual cleaning is done by a contractor.

Similarly, roadway and bridge maintenance is done as often as needed based on observations by Highway Department personnel and calls from residents. Where determined necessary, the Highway Department will employ preventative measures to address potential erosion and sedimentation effects. Depending on the stormwater control improvements at a site, the Department may use riprap, velocity dissipators, siltation pits, grassed swales or other measures.

The Highway Department's vehicles are washed once each month. Vehicles are maintained regularly, including preventative maintenance and other vehicle problems are dealt with as needed.

The Town of North Salem Highway Department adheres to the written "Salt Storage Policy" attached hereto. This policy contains specific measures related to the application and storage of salt, other de-icing substances and safety and environmental standards, including procedures for loading/unloading, spillage and cleanup. The Town's storage facilities and vehicles are regularly inspected and maintained. Vehicles are washed in designated areas and the resulting runoff is directed to on-site retention areas. As noted above, there are monthly training and safety meetings.

The Town of North Salem will obtain the NYSDEC NPS (Non-Point Source) Management Practices Catalog or an equivalent source of information and follow the standards therein.

E. Cooperating MS4s

The Town of North Salem will explore the options available for development of a regional approach to stormwater management with adjoining communities and the Westchester County Planning Department. This approach has been discussed by the Northern Westchester Watershed Committee and will be considered further. When more details of possible involvement in a regional stormwater management plan are developed, the Town of North Salem will consider whether to become involved in this regional effort.