SW 6:

MAINTAIN SITE BASED STORMWATER DETENTION SYSTEMS

Administrative Code of the City of New York
Proposal developed by the Site & Site Stormwater Committee

Summary

Issue:
Site-based stormwater diversion and detention systems must be properly maintained to be a reliable component of the city’s stormwater infrastructure.

Recommendation:
Establish maintenance standards for site-based stormwater systems, and require property owners to verify compliance.

Proposed Legislation, Rule or Study

Amendments to the Administrative Code of the City of New York:
1. Add a new Section as follows:

Maintenance and Performance Standards.

a. No later than July first, two thousand eleven, the department shall promulgate rules establishing maintenance and performance standards for stormwater detention systems constructed pursuant to a permit or requirement issued by the department. For the purposes of this section, “stormwater detention systems” shall include, but not be limited to, detention tanks, rooftop detention systems, drywells, gravel pits and any other stormwater detention systems allowed by the department.

b. No later than July first, two thousand eleven, the department shall promulgate rules requiring the owners of buildings that have received a permit pursuant to section 24-507 of the administrative code to submit an operations and maintenance plan for any stormwater detention systems included in such permit. Such rules shall require building owners to:

1. Include in the operations and management plan any activities required to keep the stormwater detention system in compliance with the rules promulgated pursuant to subdivision (a) of this section.

2. Maintain an inspection and maintenance logbook and make such logbook available for review by the department upon request.

3. Obtain certification no less than every five years from a third-party inspector authorized by the department to inspect stormwater detention systems. The department shall develop the documentation and performance standards and the testing protocols for such certification. The department shall establish an audit program, which will inspect no less than five percent of the certification reports submitted annually. The department shall be authorized to establish fines for failure to comply with the requirements of such certification program and fees for participation.

Supporting Information

Issue - Expanded
As a result of the green building movement, some cities are revisiting their approach to stormwater management. Many cities now seek to mimic natural systems for capturing stormwater, with approaches such as permeable pavement and detention basins, rather than relying solely on structural solutions to stormwater. Indeed, Staten Island’s “Bluebelt” is a famous and enormously successful effort to reduce stormwater through both structural and non-structural, site-based systems such as engineered ponds, wetlands, outlet silting basins and sand filters.

Another proposal from the Task Force, SWS: Encourage Innovative Stormwater Practices, would require the NYC Department of Environmental Protection to develop regulations that will encourage site-based stormwater detention and diversion systems. These site-based systems, however, can only become a reliable part of the overall city stormwater system if they are maintained to ensure proper function. For example, permeable pavement requires periodic cleaning to remain porous, as do rooftop detention systems and silting basins that can become clogged or silted up.
This proposal would require the department to develop maintenance standards to ensure that site-based stormwater systems can be reliable components of the citywide stormwater system.

**Environmental & Health Benefits**
Reduced runoff results in a reduction of combined sewer overflow (CSO) that in turn reduces the risk of exposure to disease-causing bacteria and viruses. 
This proposal was found to have a positive, indirect environmental impact.
This proposal was found to have a positive, indirect health impact.

**Cost & Savings**
This proposal is for a study, which will have no direct impact on construction costs.

**Precedents**

**LEED**
The effectiveness of this proposal relative to LEED certification will depend on the precise regulations that are adopted by the city when the program is implemented.
This proposal may facilitate achieving the following credits that govern the reduction of stormwater volumes:

- LEED NC-SS cr. 6.1 Stormwater Design, Quantity Control
- LEED CI-SS cr.1B Stormwater Management, Rate and Quantity
- LEED EB-SS cr.5.1 & 5.2 Stormwater Management
- LEED for Schools SS cr. 6.1 Stormwater Design, Quantity Control
- LEED for Homes SS cr.4 Surface Water Management
- LEED ND-GCT cr.9 Stormwater Management (pilot program)
- other LEED pilot programs under development.

LEED for New Construction SS cr. 6.2 Stormwater Design, Quality Control requires the implementation of a stormwater management plan to reduce or eliminate water pollution. This plan must utilize acceptable Best Management Practices (BMPs). The BMP’s are considered to meet with LEED if they are in accordance with standards and specifications from a state or local program that has adopted the LEED performance standards. Therefore, revisions to the code under this proposal may result in achieving LEED credits, provided that the standards comply with the criteria outlined in the reference guides.

**Implementation & Market Availability**
There are no known implementation issues associated for this proposal.