SW 3: REDUCE STORMWATER RUNOFF FROM CONSTRUCTION SITES

New York City Building Code
Proposal developed by Site & Site Stormwater Committee

Summary
Issue:
While state and federal regulations limit stormwater discharge from construction sites that are larger than an acre, smaller sites are unregulated. In New York City, many construction sites are well under an acre.

Recommendation:
Require construction sites of less than an acre to reduce runoff, soil loss, sedimentation, and the generation of dust and particulate matter.

Proposed Legislation, Rule or Study
Amendments to the New York City Building Code:

1. Add a new section BC 3321 to read as follows:

   **SECTION BC 3321**
   Construction Activity Pollution Prevention

   3321.1 Erosion and sedimentation control plan. No permit shall be issued for the construction or demolition of a building until an erosion and sedimentation control plan in accordance with rules promulgated by the Commissioner has been approved by the department. The Commissioner shall promulgate rules establishing requirements for erosion and sedimentation control plans. In promulgating such rules, the Commissioner shall consider the standards of the 2003 EPA Construction General Permit and New York State Pollutant Discharge Elimination System and consider measures to accomplish the following objectives:

   1. Prevent loss of soil during construction by stormwater runoff and/or wind erosion, including protecting topsoil by stockpiling for reuse;
   2. Prevent sedimentation of storm sewer or receiving streams; and
   3. Prevent polluting the air with dust and particulate matter.

   Exception: Construction or demolition projects where a total of less than 2,000 square feet of the construction or demolition site is impacted by construction or demolition, or the siting or transportation of construction materials or equipment. Such projects shall submit a site plan clearly showing the total area in which construction or demolition, or the siting or transportation of construction materials or equipment, will occur.

Supporting Information

Issue – Expanded
In New York State, stormwater discharges from construction activities that disturb one acre or more of land must receive a New York State Pollution Discharge Elimination System (SPDES) permit. These permits require the contractor to prepare a stormwater pollution prevention plan. With certain exceptions (such as construction in the “East of Hudson” watershed), sites less than one acre do not require a SPDES permit.

While a one-acre minimum may make sense as the cut-off in rural areas, very few construction sites in New York City are this large. As a result, construction sites in New York City are not covered by NYS stormwater mitigation requirements. This proposal would fill the regulatory gap by requiring all construction sites in New York City that disturb more than 2,000 square feet to develop a stormwater pollution prevention plan.

Environmental & Health Benefits
Reduced runoff results in a reduction of combined sewage overflow (CSO) that in turn reduces the risk of exposure to...
This proposal was found to have a low, positive environmental impact per building and to impact a small number of buildings. It was thus given an environmental score of 1.

This proposal was found to have no significant positive health impact.

Cost & Savings
As described in the Executive Summary, Bovis Lend Lease prepared cost estimates for each Task Force proposal in the context of well-defined construction projects in specific buildings. Where possible, members of the Technical Committees prepared savings estimates for some of these projects and buildings. These cost and savings estimates are presented in the February 1st draft version of Appendix A. The innate uncertainty in how construction and operation will vary from one building to another, the complexity of the Task Force proposals, and the wide range of applications in which the proposals may be realized mean these figures are truly estimates.

This proposal was estimated to increase first capital costs by 0.05% to 0.06%, depending on building type. It was thus categorized as incurring a low to a medium capital cost increment.

Precedents
The City and County of Denver\(^1\) as well as the Virginia Department of Conservation & Recreation\(^2\) have stormwater management plans in place that limit the runoff of stormwater from construction sites.

Note: One acre is the common trigger for Construction Activities Stormwater Management. General permits cover smaller sites. However, it is common for special situations to require permits for disturbances typically greater than 2,500 square feet. Special situations include historic districts, environmentally sensitive areas, etc.

LEED
All projects pursuing LEED certification must meet the requirements of the EPA Construction General Permit (CGP), as this is a prerequisite of the rating systems (with the exception of LEED CI). Since the code revisions outlined in this proposal reference the EPA guidelines directly, this proposal will have a significant positive impact on achieving LEED certification.

Although the CGP only applies to construction sites greater than 1 acre. The requirements are applied to all projects for the purposes of the LEED prerequisites. Therefore, these recommended code revisions are applicable.

The following LEED prerequisites apply: NC-SS prerequisite 1 Construction Activity Pollution Prevention; EB-SS prerequisite 1 Erosion & Sedimentation Control; LEED for Schools SS prerequisite 1 Construction Activity Pollution Prevention Required; LEED for Retail (pilot program) SS prerequisite 1 Construction Activity Pollution Prevention; LEED ND (pilot program) GCT prerequisite 1 Construction Activity Pollution Prevention.

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

The technology and materials required to support the reduction in stormwater runoff are widely available.

ENDNOTES: