Prior to updating the Stormwater Regulations, application procedures, and technical design requirements for development projects, the Philadelphia Water Department (PWD) is soliciting feedback from the development community about the proposed changes. This document summarizes feedback from two focus groups with the same agenda but different participants. The first focus group was held on January 7, 2015 and the second on February 12, 2015.

Overview

Representatives from the development community including design professionals, developers, engineers, and nonprofit partners attended the focus group held at the Pennsylvania Horticultural Society. The first half of the focus group emphasized procedural changes and the second half concentrated on technical changes. Attendees were divided into four small discussion groups and responded to questions on the following topics:

- How to improve the current review process and the quality/completeness of submissions;
- Input regarding good ideas from other communities outside of Philadelphia;
- Process and design incentives;
- Factors that influence design choices;
- Tools that may be helpful in developing designs;
- The effectiveness of PWD's current green project review process;
- Infiltration testing guidance;
- Technical requirements such as loading ratios and orifice sizing;
- The use of proprietary products; and
- The exclusion of rooftop drainage areas from the new water quality treatment requirement.

Summary of Feedback

Procedural Improvements

The feedback regarding the review process was consistent with comments PWD has received from the development community in the past, including:

- Balancing predictability and flexibility;
- Making green stormwater design a priority; and
- Providing more ways to expedite and streamline reviews and approvals.

Predictability and Flexibility

Several participants mentioned the need for improved communication through checklists or additional guidance to make the process as clear and predictable as possible. One attendee stated that the current program does not adequately provide opportunities for creativity or flexibility. When looking to balance predictability with flexibility, many attendees felt that standard details and sizing tables would be helpful tools in developing designs but that consistency and accessibility with reviewers was important in handling deviations or variations. One attendee mentioned that Seattle's program in Washington State balances standardization and flexibility well.

Incentives for Green Designs

Regarding process and design incentives that would encourage the use of green designs such as bioinfiltration and bioretention practices, participants favored expedited review times but mentioned they are not necessarily a big enough incentive to choose green designs over other cost effective solutions. Attendees also wanted to be clear on proposed eligibility requirements and what specific SMPs would be eligible for an expedited review. A few people suggested that PWD provide a better process for notifying applicants that a project is eligible for green review. One attendee mentioned tax credits as an additional incentive and another suggested a stormwater mitigation bank (Washington DC has a stormwater credit trading program in place). Cost and site constraints were seen as the most important factors that influence SMP selection.

Expedited Reviews and Approvals

Several people mentioned the need for consistency among reviewers to help reduce the review timeframes. Others suggested a more open, interactive review process to improve communication between the designers and the reviewers. In particular, several attendees suggested that PWD institute pre-application or "sketch plan" meetings to ensure better submissions and reduce back and forth conversations. An attendee referenced how a brief phone call from a reviewer could potentially save a project multiple days of review. Many attendees reported that communication and collaboration between designers and reviewers is generally more open in suburban areas outside of Philadelphia, and that other jurisdictions better integrate the review process across municipal agencies (ex: Water, L&I, Streets).

Additional comments involving improvements to the review process and the quality of submissions included:

- Provide standard review comments;
- Establish an escrow account to cover review fees;
- Allow for review fee payment and O&M finalization as conditions of approval to avoid delays at the end of the review process;
- Improve coordination within the Water Department to streamline approvals for stormwater and water and sewer connections;
- Improve communication with other City agencies such as Streets Department and Licenses and Inspections;
- Create permits by rule and general permits like the PADEP and United States Army Corps of Engineers (USACE) General Permits;
- Consider performance standards as opposed to design standards; and
- Improve general communications with the development community through tools such as focus groups, newsletters, case studies, or an awards program for innovative projects.

<u>Technical Requirements</u>

Infiltration Testing

Participants disagreed about whether allowing developers to defer infiltration testing for green projects until construction would be helpful. Some thought it would be a very beneficial incentive while others didn't think it was a good idea.

There was consensus in allowing alternate testing methods such as borehole tests. However, attendees expressed caution in using borehole infiltration testing exclusively. One attendee stated that double ring infiltrometer testing should be used whenever possible and another suggested using borehole testing in conjunction with double ring infiltrometer testing.

Attendees believed that allowing for infiltration rates lower than 0.5 inches per hour could be helpful; however there were concerns about long-term performance and the need for increased monitoring and maintenance. Several participants noted that the state minimum rate is 0.1"/hour. However, many suggested PWD provide a range of rates based on variables such as loading ratio and soil conditions. Taking consideration of evapotranspiration was also noted.

Loading Ratios

Most attendees felt that loading ratios should be adjusted based on site characteristics and level of pre-treatment. One attendee said, "There's no one size fits all solution for loading ratios." Some suggested using different rates for ground-level versus rooftop runoff.

Orifice Sizing

Most attendees had seen 3 inches as a minimum orifice size (New Jersey's standard is 3") and expressed concerns about clogging with smaller orifice sizes. Some engineers had experiences with 1.5" orifices. Participants felt that it would be difficult to meet PWD's proposed 0.05 cfs per acre peak release rate without using a smaller orifice. Sizing tables could help with orifice sizing but only as a guide; flexibility will be important in developing design solutions, particularly for smaller sites. Attendees said that design solutions for smaller sites may require pumps and the use of dynamic storage capacity.

Proprietary Products

Attendees expressed the need for an approved list of acceptable proprietary products. Examples of some proprietary products provided included rainwater harvesting systems, vortex separators, dynamic separators, and carbon filter systems. Many attendees felt that these systems are expensive and difficult to maintain. New Jersey's Department of Environmental Protection could be a resource for PWD to explore more proprietary products.

Excluding Rooftop Drainage Areas from the Water Quality Treatment Requirement

This concept was generally seen by attendees as an advantage but some questioned whether the pollutant loads from rooftops are truly low enough to be excluded. Some attendees expressed a concern that this approach could lead to the need for more stormwater practices to prevent comingling of rooftop and surface runoff. Participants requested that PWD provide detailed design guidance for this approach.