

**D&C Standards Update
May 31, 2006
Meeting Notes**

This meeting covered two topics: 1) Vegetated Corridors—Plant Densities/Monitoring; and, 2) Low Impact Development. Nora Curtis facilitated the first, and Terry Keyes and Carrie Pak facilitated the Low Impact Development, with staff taking notes. Highlights of each discussion are summarized below.

Vegetated Corridors—Plant Densities/Monitoring

Summary

Ten stakeholders and eight Clean Water Services employees participated in this session. Nora reviewed the concerns we've heard about densities, the goals for healthy established corridors with minimal long-term maintenance, and identified the following potential options:

- a. Status quo—no changes now, but gather data
- b. Improve/Clarify/Strengthen site prep requirements
- c. Vary monitoring period based on initial corridor condition and/or level of site preparation
 - Good Condition or few invasives=shorter monitoring period
 - Poor Condition with many invasives=longer monitoring period
 - Offer option of Prescriptive v. Performance Plans
 - Prescriptive would be existing standards/spacing with “success” defined by % survival
 - Performance would allow designer flexibility with minimum densities and “success” defined by % cover
- d. Offer option to “buy out” extended maintenance with increased site preparation (will require District management discussion/approval)

Then the group discussed balancing site prep and existing corridor condition with the monitoring period, allowing for differences of opinion by designers, and how to determine appropriate monitoring periods. Attendees offered many ideas and suggestions, often building upon the May 9 discussion. Key points were the pros and cons of prescriptive standards vs. performance standards and how to ensure compliance. Site prep, irrigation, plant size and type, time of planting, monitoring, and the skill level of the landscaping contractors are all critical to the successful establishment of plants. The prescriptive approach could require site prep and irrigation in exchange for maintenance. However, a discussion of irrigation revealed that few developers do it, water district policies deter it (SDCs and water meters for short term), and staff finds spot watering and other alternatives more effective.

Other ideas included: The size and type of plants may be critical to how long they take to establish, and perhaps bare root stock should be allowed—although that might be a certification problem. Give “credit” on maintenance for better plants and time of planting. Educate landscapers on proper maintenance of sensitive areas, or consider requiring a maintenance contract. Require a monitoring report at least annually. Develop a scope of work for monitoring reports to help avoid cost discrepancies. Research BPA online monitoring reports (accepted reports indicate successful consultants and maintenance contractors). Consider minimum 3-

year maintenance period (get plants to the “leap” stage). Allow developers to transfer maintenance to homeowners.

Next Steps

Staff will develop options and draft language for review by September. Attendees were asked to suggest language to help articulate a performance option.

Issue: Low Impact Development

Summary

Terry Keyes and Carrie Pak led the group in reviewing Low Impact Development approaches and methods identified in the Goal 5 Issue Paper #2. Emphasis was on the need for standards that do not preclude engineering creativity. The group identified items that would require modifications to the current Design & Construction Standards.

Existing topics/issues

- If pervious material is approved, revise runoff coefficient to reflect expected infiltration rates.
- If pervious material is approved, long-term maintenance issues and enforcement must be addressed up front to avoid unintended consequences (i.e. future owner seals the surface).
- If pervious material is approved, the area it serves should not be included when sizing for water treatment facilities; provide full water quality credit for it.
- Parking lot design: appropriate increased use of pervious materials is desirable.
- Landscaping: consider changing criteria for requiring fences for stormwater facilities unless fences are needed for public safety (i.e. steep side slopes).
- Street design: does not directly affect D&C Standards, however, jurisdictions can have a variety of policies about curb and gutter design versus swales (i.e. Gresham uses concrete pavers for street parking; Washington County allows porous sidewalks for developers as well as any private streets). Where pervious pavement is utilized, D&C Standards will identify appropriate runoff coefficient and maintenance requirements.
- Stormwater management facilities: District does not allow underground detention and/or treatment (Washington County allows cartridge systems for road construction); could leave as an option
- Building design: do not allow simple downspout disconnections; should treat the runoff
- Water quality treatment credits can be used for using native plants and providing soil amendments.
- Any low impact development practices will need some level of post construction certification process that will ensure properly functioning facilities.

Next Steps

Staff will develop an issue paper and begin to draft language. This topic will be discussed again in a future meeting.